

**SKRIPSI**  
**THE EFFECT OF IMAGE STREAMING METHOD ON STUDENTS’**  
**ABILITY IN WRITING NARRATIVE PARAGRAPH AT THE TENTH**  
**GRADE OF MAS PAB 2 HELVETIA MEDAN**  
**IN 2016/2017 ACADEMIC YEAR**

*Submitted to the Faculty of Tarbiyah and Teachers Training, State Islamic  
University of North Sumatera Medan as a Partial Fulfillment of the Requirements  
for Sarjana Pendidikan*

**BY:**  
**RIZKA KHAIRINI**  
**NIM. 34.13.1.037**

**Advisor I**

**Advisor II**

**Dr. Sholihatul Hamidah Daulay, S. Ag, M. Hum**  
**NIP. 19750622 200312 2 002**

**Utami Dewi, S. Pd, M. Hum**  
**NIP. 19820227 200801 2 009**



**DEPARTMENT OF ENGLISH EDUCATION**  
**FACULTY OF TARBIYAH SCIENCE AND TEACHERS TRAINING**  
**STATE ISLAMIC UNIVERSITY OF**  
**NORTH SUMATERA**  
**MEDAN**  
**2017**

## ABSTRACT

**RIZKA KHAIRINI. THE EFFECT OF IMAGE STREAMING METHOD ON STUDENTS' ABILITY IN WRITING NARRATIVE PARAGRAPH AT THE TENTH GRADE OF MAS PAB 2 HELVETIA MEDAN IN 2016/2017 ACADEMIC YEAR.**

Skripsi, Medan: Department of English Education, Faculty of Tarbiyah Science and Teachers Training, State Islamic University of North Sumatera, Medan 2017.

*Keywords: Image Streaming method, Students' Ability in Writing Descriptive Text*

This research was intended to find out the empirical evidence of the students' achievement in writing narrative paragraph by using Image Streaming Method at the tenth grade of MAS PAB 2 Helvetia Medan. This research was experimental research. The population of this research was all students of class X of MAS PAB 2 Helvetia Medan. The samples of this research were taken from 30 students of experimental group (class X-1) and 30 students of control group (class X-2). The instrument for collecting data was a test. After analyzing the data, the writer got; (1) The students' ability in writing narrative paragraph by Image Streaming method got the mean 77.26 and standard deviation was 6.61; (2) The students' ability in writing narrative paragraph by using conventional strategy got the mean 66.86 and standard deviation was 6.94. The value of  $t_{\text{observed}}$  was 5.754 and that of  $t_{\text{table}}$  was 2.009. So the value of  $t_{\text{observed}}$  was higher than that of  $t_{\text{table}}$ . It means that there was significant effect of using Image Streaming method on students' ability in writing narrative paragraph.

## ACKNOWLEDGMENT

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

In the name of Allah, the Beneficent, the Merciful. Praise and Gratitude be to Allah for giving the strength and guidance to the writer, so that this *skripsi* can be finished accordingly. Peace and blessing be upon the Prophet Muhammad *Shallallaahu ‘alaihi wa salaam*, his family, his relatives, and all his followers.

The writing of this *skripsi* entitled “The Effect of Image Streaming method on Students’ Ability in Writing Narrative paragraph at the Tenth Grade of MAS PAB 2 Helvetia Medan in 2016/2017 Academic Year”. This *skripsi* is written to fulfill one of the requirements to obtain the *Sarjana Pendidikan degree* at the Department of English Education, Faculty of Tarbiyah and Teachers Training, State Islamic University of North Sumatera.

The writing this *skripsi* is actually a miracle for me since it was firstly regarded as a task would be very hard to do. However, it has now been denied since this *skripsi* has finally been written. Then, I would like to thank Allah *Subhaanahu Wa Ta’ala* for His Blessing given to me so that the writing of this *skripsi* has been finished without any meaningful problem. Additionally, the writer is grateful to the following for their supports and helps.

1. **Dr. Amirruddin Siahaan, M.Pd** as the Dean of Faculty of Tarbiyah and Teacher Training State Islamic University of North Sumatera.
2. **Dr. Sholihatul Hamidah Daulay, S.Ag, M.Hum** the Head of English Educational Department and my first advisor who has given suggestion, correction, beneficial opinion and encouragement in process of writing this *skripsi*.

3. **Utami Dewi, S. Pd, M. Humas** my second advisor who has also given suggestion, correction, beneficial opinion and encouragement in process of writing this *skripsi*.
4. All lecturers in the English Department for teaching precious knowledge, sharing philosophy of life, and giving wonderful study experience.
5. The principal of MAS PAB 2 Helvetia Medan, English teacher and all students of X-1 and X2 class who helped the writer during the research.
6. My beloved parents **Amir Hamzah Pulungan** and **Rosdiah** who always give me support, advice, motivation, help, goodness, care, and all things that I need to finish my study.
7. My beloved brother **Ahmad Syarqowi Pulungan, L.c, Fathur Rahman Baihaqi** and my beloved sister **Nadia Khairina** who have supported me in completing my study at Faculty of Tarbiyah and Teachers Training, State Islamic University of North Sumatera.
8. My beloved family **Prof. Dr. H. M. Yasir Nasution, MA, Dra. Hasnun, S.Pd.I, Azizah, S.Pd.I, Irfan Mustafa, S.Pd.I**, thank you so much for helped my college tuition and thank you for your support and motivation
9. All of my family in PBI-5, and dorm Al-Barokah thank you so much for your support and motivation.
10. My best friends **Rizki Tia Maudina, Shela Rizkina** and **Agus Surya Sibarani** who always support each other, sharing the information, accompanied me, entertaining me, and be “crazy” with me until we can finish our final task together.

11. My best friend since Senior High School, the one and only **NVAFamily** who always pray and support me until I can finish my study.

At last, this *skripsi* is far from being perfect, but it is expected that this *skripsi* will be useful not only for the writer, but also the readers. For these reasons, constructive thoughts, full suggestions, and critics are welcome to make this *skripsi* better.

Finally, may Allah *Subhaanahu Wa Ta'ala* receives all their work and kindnesses. Aamiin.

Medan, April 2017

**The Writer**

**Rizka Khairini**  
**NIM. 34.13.1.037**

## TABLE OF CONTENTS

|  |             |
|--|-------------|
| <b>ABSTRACT.....</b>                           | <b>i</b>    |
| <b>ACKNOWLEDGMENT .....</b>                    | <b>ii</b>   |
| <b>TABLE OF CONTENTS .....</b>                 | <b>v</b>    |
| <b>LIST OF TABLES .....</b>                    | <b>viii</b> |
| <b>LIST OF APPENDICES .....</b>                | <b>x</b>    |
| <br>   |             |
| <b>CHAPTER I: INTRODUCTION .....</b>           | <b>1</b>    |
| A. Background of Study .....                   | 1           |
| B. Identification of the Problems .....        | 3           |
| C. Formulation of the Problem .....            | 3           |
| D. Objectives of the Study .....               | 3           |
| E. Significances of the Study .....            | 3           |
| <br>   |             |
| <b>CHAPTER II: THEORETICAL FRAMEWORK .....</b> | <b>5</b>    |
| A. Theoretical Framework .....                 | 5           |
| 1. Method .....                                | 5           |
| 2. Image Streaming .....                       | 6           |
| 3. Writing .....                               | 13          |
| 4. Genre of Writing .....                      | 14          |
| 4.1 Narrative Paragraph .....                  | 14          |
| 5.Paragraph .....                              | 17          |
| 5.1 The Topic Sentence .....                   | 18          |

|  |           |
|--|-----------|
| 5.2 The Supporting Sentence .....              | 18        |
| 5.3. The Concluding Sentence .....             | 19        |
| 5.4. Unity .....                               | 19        |
| 5.5. Coherence .....                           | 19        |
| 5.6. Transition .....                          | 20        |
| 6. Writing Narrative Paragraph .....           | 20        |
| 7. Assessment of Writing .....                 | 21        |
| B. Conceptual Framework .....                  | 23        |
| C. Hypothesis .....                            | 24        |
| <b>CHAPTER III: RESEARCH METHODOLOGY .....</b> | <b>25</b> |
| A. Location of Research .....                  | 25        |
| B. Research Design .....                       | 25        |
| C. Population and Sample .....                 | 25        |
| 1. Population .....                            | 25        |
| 2. Sample .....                                | 25        |
| D. The Instrument for Collecting Data .....    | 26        |
| E. Techniques of Collecting Data .....         | 27        |
| 1. Pre Test .....                              | 27        |
| 2. Treatment .....                             | 27        |
| 3. Post Test .....                             | 28        |
| F. Scoring the Test .....                      | 28        |
| G. The Technique for Analysing Data.....       | 30        |

## **CHAPTER IV: DATA ANALYSIS AND RESEARCH**

|  |               |
|--|---------------|
| <b>FINDING .....</b>                                   | <b>32</b>     |
| A. The Data .....                                      | 32            |
| B. Data Analysis .....                                 | 33            |
| 1. Analyzing the Data by Using T-test Formula .....    | 33            |
| 3. Hypothesis Testing .....                            | 36            |
| C. Research Finding .....                              | 37            |
| <br><b>CHAPTER V: CONCLUSION AND SUGGESTIONS .....</b> | <br><b>38</b> |
| A. Conclusion .....                                    | 38            |
| B. Suggestions .....                                   | 38            |
| <br><b>REFERENCES.....</b>                             | <br><b>40</b> |



## LIST OF TABLES

| Table | Title   |
|-------|---|
| I     | Research Design   |
| II    | Population  |
| III   | The Rubric Scoring Scale of Students' Writing Test        |
| VI    | The Score of Pre Test and Post Test of Experimental Group |
| V     | The Score of Pre Test and Post Test of Control Group      |
| VI    | Frequency Distribution of Pre Test in Experimental Group  |
| VII   | Normality Testing of Pre Test in Experimental Group       |
| VII   | Frequency Distribution of Post Test in Experimental Group |
| IX    | Normality Testing of Post Test in Experimental Group      |
| X     | Frequency Distribution of Pre Test in Control Group       |
| XI    | Normality Testing of Pre Test in Control Group            |
| XII   | Frequency Distribution of Post Test in Control Group      |
| XIII  | Normality Testing of Pre Test in Control Group            |
| XIV   | Mean of Post Test – Pre Test in Experimental Group        |
| XV    | Mean of Post Test – Pre Test in Control Group             |

## LIST OF APPENDICES

| <b>Appendix</b> | <b>Title</b>   |
|-----------------|--|
| A               | Pre Test   |
| B               | Post Test  |
| C               | Key Answer of Pre Test                                       |
| D               | Key Answer of Post Test                                      |
| E               | Lesson Plan for Experimental Group                           |
| F               | Lesson Plan for Control Group                                |
| G               | Students' Name of Experimental Group                         |
| H               | Students' Name of Control Group                              |
| I               | The Score of Pre-test and Post-test of<br>Experimental Group |
| J               | The Score of Pre-test and Post-test of Control<br>Group      |
| K               | Normality Testing of Experimental and control<br>Group       |
| L               | Homogeneity Testing of Pre-test and Post-test                |
| M               | The Critical Value Liliefors Test                            |
| N               | Table of F Distribution                                      |
| O               | Percentage Point of T Distribution                           |
| P               | Documentation  |

# CHAPTER I

## INTRODUCTION

### A. Background of the Study

Writing is the expression of language in the form of letters, symbols, or words.<sup>1</sup> Writing is important way in communication for human life because it is one of language skills. As one skill of English, writing can help students to learn and develop their English by expressing their knowledge, experience and so on. It can be expressed in form of essay, a paragraph, a letter, a short story and etc.

The writer observed the students' ability in writing narrative paragraph. There are some writing that are confusing the reader. It is happen because the students are lack to organize their idea. The students are difficult to generate and translate the idea into narrative paragraph. To write a narrative paragraph the students should know its elements such as characters, setting, plot, conflict, and resolution.

In addition to that, the teachers just use the conventional method in teaching and force the students to memorize, which can make the students felt bored. Therefore, the students are not interested to the subject then some students had low achievement. This phenomenon create the students writing ability will never develop.

The problems can be overcome by making the aware of the steps or phases to reach the target of creating a story from their real life experience. Through the application of a method called by image streaming which has become popular in

---

<sup>1</sup>Utami Dewi, (2011), *How To Write*, Medan: La-Tansa Press, p. 2

the area of teaching writing, it is expected that the students can find it easier to write a narrative paragraph.

Understanding of Image streaming method itself is a mental exercise for the purpose of visualizing an event which has been stored in the memory.<sup>2</sup> The important thing from this method is to describe the experience upon experience and observe it, so we simply do not know and aware that the experience was there.

The advantages of Image Streaming method are as follows: Increase Brain Power, help improve learning, improving and building the foundation of understanding, to create more meaningful learning, train students to think creatively, and improving the ability of observation.

The writer as a researcher has observed the fact that the students of Senior High School find it difficult to write a narrative paragraph because they have little knowledge of the step to produce the composition. The writer expects that through the application of the Image Streaming technique, the student will have a greater ability to produce a story based on their life experiences.

Based on the issues above researcher intend to conduct research on **"The Effect of Image Streaming Method on Student Ability in Writing Narrative Paragraph at The Tenth Grade of MAS PAB 2 Helvetia Medan"**.

---

<sup>2</sup>Win Wenger, (2011), *Beyond Teaching and Learning (Memadukan Quantum Teaching & Learning)*, Bandung: NuansaCet 3, p. 287

## **B. Identification of the Study**

1. The students have difficulties in writing, especially in writing narrative paragraph
2. The teachers do not have sufficient and suitable teaching method in writing classes.

## **C. Limitation of the Study**

Based in the identification of the problem, the limitation of this study focus on identifying in the effects of Image Streaming Method on Student Ability in Writing Narrative at The Tenth Grade of MAS PAB 2 Helvetia Medan in academic year 2016/2017.

## **D. Formulation of the Study**

In the relation to the background of the study, the research addresses the problem as the following: Is there any significant effect of image streaming method on student ability in writing narrative paragraph?

## **E. Objective of the Study**

Based on the problem above the objective of study is: to find out whether applying Image Streaming method significantly affects the students' ability in writing narrative paragraph.

## **F. Significant of the Study**

The result or findings of the study will be significant to those who want to master the procedures of writing a narrative. They also provide information about the difficulties or even errors in producing the texts. Teacher and lecturers can

learn something valuable about the students' problems in writing a narrative. The problems identified in the study can be used as a reference to design a syllabus or curriculum for writing skills.

## CHAPTER II

### THEORITICAL FREMEWORK

#### A. Theoritical Freamework

Terms are used clarify the concepts in a research. The following are explained and elaborated to avoid confusion in the discussion of the research.

##### 1. Method

Method is a word that refers to the means to be used to achieve a goal that is expected. If it is associated with the learning process, the learning method definition can be interpreted as a way chosen by educators to optimize the learning process that aims to achieve the expected learning goals.<sup>3</sup>

Each class may be the possibility of using different learning methods with other classes. For that a teacher should be able to apply various methods of learning. The following are some kinds of learning methods:

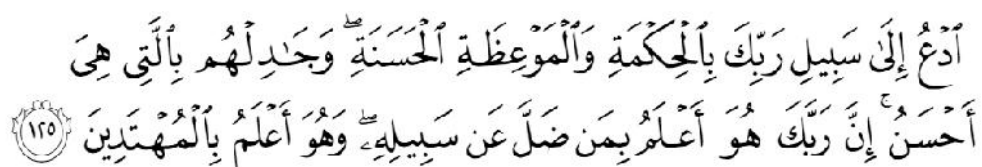
- a. Methods Study Tour (Travel Work)
- b. Team Teaching Methods
- c. Project Method
- d. Global Method
- e. Peer Teaching Method
- f. Problem solving Method

---

<sup>3</sup>Word Press, 2017, *Pengertian A-Z: Pengertian Metode Pembelajaran*, <http://artikelaz.com/pengertian-metode-pembelajaran/>, Accessed on 19<sup>th</sup> February 2017

g. Image Streaming Method<sup>4</sup>

Allah said in the Holy Qur'an in surah An-Nahl in the 125<sup>th</sup> verse. It says:



Meaning: *“Invite to the way of your Lord with wisdom and good instruction, and argue with them in a way that is best. Indeed, your Lord is most knowing of who has strayed from His way, and He is most knowing of who is [rightly] guided.”*<sup>5</sup> (Q.S. An-Nahl: 125)

From the verse above, Allah asked the human to give the lesson by wisdom, wisdom means the way by the right method. It can help the teacher to make teaching learning process run well.

There are varieties of strategy that can be used to support cooperative learning in the classroom. Such strategies include Jigsaw in reading skill, Think-Pair-Share to develop speaking skill and Round Robin Writing for writing skill.

## 2. Image Streaming

Image streaming is a mental exercise for the purpose of visualizing an event which has been stored in the memory. The subconscious memory contains

---

<sup>4</sup>Belajarspikologi.com, 2017, *Macam-macam Metode Pembelajaran*, <http://belajarspikologi.com/macam-macammetodepembelajaran/>, Accessed on 20<sup>th</sup> February 2017.

<sup>5</sup>Muhammad HabibShakir, *The Quran Translation Muhammad HabibShakir English Only*, New York: Tahrike Quran, p.127



information which can be used to solve the problems encountered in life. Image streaming is believed to rise the level of intelligence because of the stored information. It can also create a vision in the mind which leads to the ability to make plans.<sup>6</sup> In other words, the process of Image Streaming is like flow of pictures created in the mind. The activity can draw the subconscious powers of the mind to solve problems of any kind in life such as the problems of writing narrative paragraph. A narrative consists of some elements which should be well understood in order to produce a coherent story.

The important thing from this method is to describe the experience upon experience and observe it, so we simply do not know and aware that the experience was there. Actually, we do not only stay awake and alert for our perception, but also broaden and deepen our perception by the feedback from our own description. The entire process is interesting perception deeper into the conscious focus.<sup>7</sup>

With the technique of describe or explained the goal of our learning answers become part of what is specified quickly and easily, and part of what has been pulled into the full focus of our conscious thinking. Let yourself to imagine and describe these images freely, without the user aware of shadows like what a process called shadows image streaming or stream provides an opportunity to demonstrate understandings that are important and meaningful.<sup>8</sup>

---

<sup>6</sup>Win Wenger, (2011), *Op. Cit*, p.287

<sup>7</sup>*Ibid*, p. 298

<sup>8</sup>*Ibid*, p. 300

Basically, to drain the shadows is seen, and then find any shadow chance to play in the “Mind’s Eye” at the time described clearly or with a tape recorder. It is very different to determine consciously chosen shade.<sup>9</sup>

This method is a blend of theory Socrates and Einstein’s theory. Where Socrates theory known as pervasive understanding the principles of the theory of Socrates is to describe the perception of thing to the listener or tape recorder with a view to be able to perceive more.<sup>10</sup>

Socrates developed a system which is able to simulate the audience to speak. Socrates encourage students find the world a much broader and deeper by investigating perceptions of their exterior and interior and describe what they found. One of the systems Socrates was asking detailed questions that provoke students to investigate and describe their perceptions on the answer.<sup>11</sup> The teacher is not aware that the active constituent of the Socratic methods is not a “question” but rather as a result of the questions that simulate people to think and work.

While Einstein’s theory is derived from the basics of visual thinking, vision contain more information and more information through hearing. Kinesthetic feeling proved to be also very important in relation to our mental experiences. According to the EEG (Electro-Encepha-Lographic), eight percent of our brain areas involved in visual response more than other senses.<sup>12</sup>

Nearly all visual responses created in eighty percent of the area of the brain turned out to coincide with our unconscious brain area. Data stored there or

---

<sup>9</sup>*Ibid*, p. 300-301

<sup>10</sup>*Ibid*, p. 290

<sup>11</sup>*Ibid*, p. 209-291

<sup>12</sup>*Ibid*, p. 293

other factors that precluded can appear (bring yourself) on the visual response. It looks like the emergence of a variety of factors unconscious on one's mind in a test of ink blobs Roarsach though involve external vision.<sup>13</sup> That is why large discoveries in science and technology usually produced by the help of visualization.

Brain activity is the simulation of brain activity by means of stimulation of brain waves. Brain activity aims to stimulate the whole brain to the fullest and to balance the functions of the right brain or left brain. Left and right brain each have a different potential, although crossing between the two parts of it were still there.

The left brain function in matters related to logic, reason, the ability to write and read as well as a center of mathematic. Some expert said that the left brain is a center Intelligence Quotient (IQ), while the right brain function in development of the Emotional Quotient (EQ). For example, socialization, communication interaction, and emotional control.

There are two type of sensory memory that has been widely studied by psycholinguistics namely the iconic and echoic memory. An iconic memory recording system senses to visual information (picture and concrete object) through the eyes of example the latter 'A'. A person is expected to see between 9-10 objects or items of 12 possibilities, iconic memories fade so quickly and disappear within half and second later.

Echoic memory is a recording system that operates within the human hearing. Stimulus processed form of the sound coming in through the sense of the

---

<sup>13</sup>*Ibid*, p. 296

ear. There are two kinds of recording senses of hearing, namely Short-term storage, the storage simplest soon disappear in less and a seconds latters after the stimulus hear abolished. Long-term storage, the information that was heard disappeared a few seconds letter after hearing stimulus abolished.<sup>14</sup>Broadly speaking, given the power or memory capacity of each person can be improved at least use can be optimized through exercises and specific strategies.

The advantages of image streaming method are asfollows:

1. Increase visual thinking skills and help direct visualization.
2. Increase neural connections with what is being studied by visualization in context so that more distant from the abstract.
3. Repair or build a foundation of understanding.
4. Generate immediate inspiration and always .<sup>15</sup>

The disadvantages of Image Streaming methodasfollows:

- a. Requires a relatively long time in the applicability
- b. Not all teachers can employ this method, teachers are in demand can bringing the atmosphere of students into the realm of deeper, so the teacher less able to master class this method is less effective at doing.
- c. This method must be done in a conducive and quiet, not effectively done in a hectic because it requires tranquility.

---

<sup>14</sup>Suharnan, (2005), *PsikologyKognitif*, Surabaya: Srikandi, p. 23

<sup>15</sup>Win Wenger, Op. Cit, p. 307

The image streaming method can be performed in the following ways:

**1. Ask yourself a question:**

A question is asked to provoke a kind of image in the mind. A question elicits some information which can be later described.

**2. Start the image stream:**

A live listener is provided with a tape recorder. Students will sit back, relax, close his eyes, and describe aloud whatever images that appears in the mind. Students then goes with the first, immediate impression and describe them aloud in a rapid flow and sensory details. More free image will then emerge. Students will notice when the scene change or other image merge, and describe these as well.

It is important to describe aloud and bring the mind images into conscious awareness, no matter how unrelated the images which first appeared. This process helps bridge the separate regions of the brain. There can be surprising images. More pictures surprising that students see in their mind's eye, it will get better.

**3. Feature – Questioning:**

Pick out some one feature—a wall, a tree or bush, whatever's there. Imagine laying a hand on that feature and studying its feel (and describe that feel), to strengthen your contact with the experience. Ask that rock or bush or wall, "Why are you here as part of my answer?" See if the imagery changes when you ask that question. Describe the changes.

#### **4. Inductive Inference:**

Once you have run a set of images, thank your Image-Streaming faculties for showing you this answer. Ask their help in understanding the messages in your images. They are often symbolic.

Repeat the process by starting a new Image-Stream, with entirely different images which nonetheless somehow are still giving you the same answer to the same question. After 2 to 3 minutes of this new imagery, repeat this step to get a third set of images, each different, yet each showing you the same answer a different way.

#### **5. What's the Same?**

Examine whatever's the same among the several sets of images when all else is different. These themes or elements-in-common are your core answer or message.

#### **6. Relate**

Go back to your original question and determine in what way or ways these core elements are the answer to your question.

#### **7. Debrief**

Summarize this whole experience either to another person (directly or by telephone) or to notebook or computer. This change of medium, and change of feedbacks, should add further to your understanding.<sup>16</sup>

It can be concluded that the method of image streaming is the unification between Socrates and Einstein's theory. Namely Einstein's theory combines the visualization of mind by allowing the images to the brain with the free following

---

<sup>16</sup>Win Wenger, 2004, *Project Renaissance: Image Streaming in brief*, <http://www.winwenger.com/imagestr.htm>, Accessed on 22<sup>th</sup> November 2016

imagination involving the unconscious brain. Then, Socrates theory describes the impregnation of understanding with those perceptions with the words aloud to someone else or to a recording. This method prioritizes the cognitive power of the brain as the source of the learning process.

With the application of such methods is expected knowledge, students can improve their understanding of critical thinking in the classroom and more established and strong belief in the teachings of Islam and practice it.

### **3. Writing**

Generally, writing is needed as a medium through which people share what they have in mind. According to McDonald and McDonald, writing is usefully described as a process; something which shows continuous change in time that should be developed and trained continuously.<sup>17</sup> Meanwhile, Langan said that writing is a process of discovery that involves a series of step, without practice, people can think the writing is difficult.<sup>18</sup>

Based on the explanation above, it shows that learning writing is assumed to be difficult and the students should develop a full understanding of the writing process so they are able to express themselves more confidently, effectively, and efficiency in order to create a piece of writing.

---

<sup>17</sup>Cristina Russel McDonald and Robert L. McDonald, 2002, *Teaching Writing: Landmarks and Horizons*, Carbondale: Southern Illinois University Press, p. 7

<sup>18</sup>John Langan, 2005, *College Writing Skill and Readins-6<sup>th</sup> Ed*, New York: McGraw Hill, p.12

#### **4. Genre of Writing**

Genre is a kind of text or writing work itself. It views that the language (writing form) must be related to social function. Social function of the text then implies a certain social environment and place where and when the text is used.<sup>19</sup>

There are various genres of text: Narrative, Descriptive, Procedure, Recount, Explanation, Analytical Exposition, Hortatory Exposition, Report, Anecdote, Spoof, Review, and News.

From the variety of genres above, the writer choose the genre of narrative to be applied in writing.

##### **4.1. Narrative Paragraph**

A narrative paragraph tells the story of an event, providing the relevant details of when and where the event occurred as well as who has included and what transpired. The paragraph describes either an actual event or a fictional one that the writer creates. Narrative paragraph usually follow in chronological order, taking the reader from the beginning of the event to the end. Transitional words, such as “later” or “then”, give the reader a clue about how the events progressed. Narrative paragraph usually communicate some sort of moral or ideal so that readers come away feeling that they have learned a lesson.<sup>20</sup>

Generic structure:

1. Orientation: Set the scene an introduced the participants
2. Evaluation: A stepping back evaluate the plight

---

<sup>19</sup>Dirgeyasa, (2014), *College Academic Writing: A Genre-Based Perspective*, Medan: Unimed Press, p. xvii.

<sup>20</sup>Charles, (2016), *Grammar*, <https://www.reference.com>sducation>, Accessed on 25<sup>th</sup> November 2016



3. Complication: A crisis arises
4. Resolution: The crisis is resolved, for better or worse
5. Reorientation: Optional<sup>21</sup>

Dominant language features:

1. Focus on specific and usually individualized participants
2. Use of material process (and in this text, behavioral, and verbal process)
3. Use of relational process and Mental process
4. Use of temporal conjunctions and temporal circumstances
5. Using past tense<sup>22</sup>

Example of narrative paragraph:

### **A Bad Camping**

On July 1<sup>st</sup> I went camping. I brought my own preparation such as food, tent, etc. I arrived at 07 o'clock in the evening. It was dark. I quickly set up my tent for it began raining. I set off to explore the jungle and I brought some food, matches, ropes, and a flashlight on my knapsack. Next, I looked my tent and after I had walked for about 2 km, I was tired. Then, I found a steep slope. There was no other way so I climbed the slope. Suddenly, one of my ropes was broken and was hooked at a casuarinas tree. I screamed for a help but no one heard me. After a few minutes, I turned on my flashlight. A ranger saw the light and he saved me. He did the first aid and he asked me, "Are you injured?" I answered, "Yes, my back is in pain." "I will handle it." He bandaged my back. After that, he went to

---

<sup>21</sup>SanggamSiahaan, (2008), *Generic Text Structure*, Yogyakarta: Graha Ilmu, p. 73

<sup>22</sup>*Ibid*, p. 74

the base camp to search for a help. Not taking a long time, he got back with his friend and they carried a litter and put me on. When the morning came, they took me to the nearest hospital. I thanked them. It was a bad experience. I only slept and I thought of my injured back. The nurse asked me, “Are you okay?” “I am a bit unwell”, I replied. I kept on sleeping and I sometimes listened to the music. When the nurse asked, I only smiled. I knew that I was not recovered yet but I led my life cheerfully. Two weeks later, I went back to Jogjakarta.<sup>23</sup>

The generic structure analysis:

1. Orientation

On July 1<sup>st</sup> I went camping. I brought my own preparation such as food, tent, etc. I arrived at 07 o'clock in the evening. It was dark.

2. Evaluation

I quickly set up my tent for it began raining. I set off to explore the jungle and I brought some food, matches, ropes, and a flashlight on my knapsack.

3. Complication

Next, I looked my tent and after I had walked for about 2 km, I was tired. Then, I found a steep slope. There was no other way so I climbed the slope. Suddenly, one of my ropes was broken and was hooked at a casuarinas tree.

4. Resolution

I screamed for a help but no one heard me. After a few minutes, I turned on my flashlight. A ranger saw the light and he saved me. He did the first aid and he asked me, “Are you injured?” I answered, “Yes, my back is in pain.” “I will handle it.” He bandaged my back. After that, he went to the base camp to

---

<sup>23</sup>*Ibid*, p. 74

search for a help. Not taking a long time, he got back with his friend and they carried a litter and put me on.

#### 5. Reorientation

When the morning came, they took me to the nearest hospital. I thanked them. It was a bad experience. I only slept and I thought of my injured back. The nurse asked me, "Are you okay?" "I am a bit unwell", I replied. I kept on sleeping and I sometimes listened to the music. When the nurse asked, I only smiled. I knew that I was not recovered yet but I led my life cheerfully. Two weeks later, I went back to Jogjakarta.

### 5. Paragraph

A paragraph is a group of related sentence that presents a unit of thought. Paragraphs provide organization and focus to a piece of writing, breaking up information into manageable chunks for readers.<sup>24</sup> Paragraph is also a unit of text that develops one idea or topic in spesific detail.<sup>25</sup> According to Bob Brannan, paragraph is collection of related sentence that are clearly connected to one other and that make some point. Paragraphs come in several varieties:

1. Introductory
2. Body
3. Concluding
4. Transitional<sup>26</sup>

---

<sup>24</sup>Upper Saddle River, New Jersey Glenview, Illinois Needdam, Massachutetts, (2001), *writing and Grammar Communication in Action*, United States: Prentice-Hall, p. 32

<sup>25</sup>Utami Dewi, (2011), *How To Write*, Medan: La-Tansa Press, p. 29

<sup>26</sup>Bob Brannan, (2003), *A Writer Workshop (Crafting Paragraphs, Building Essay)*, New York: McGraw Hill, p. 35

### **5.1.The Topic Sentence**

A paragraph should have only one central idea. A topic sentence (also known as a focus sentence) encapsulates or organises an entire paragraph, and students should be careful to include one in most of students major paragraph. Although topic sentence may appear anywhere in a paragraph, in academic essay student often appear at the beginning.<sup>27</sup>In the other words topic sentence is the main idea of a paragraph.

A good topic sentence is the sentence which can be well developed by some supports. Commonly it is not about a general truth that is common to everybody. It must be an opinion which needs to be proved. It is not too long write in a short text containing about five to ten sentence. It is not also too short to write. A good topic sentence must be interesting to attract the readers' attention.<sup>28</sup>

### **5.2.The Supporting Sentence**

A paragraph's topic sentence should be accompanied by a series of sentence that develop, explain, or illustrate. These other sentences are called supporting sentence.<sup>29</sup>Supporting sentence are the development of the main idea. A paragraph is well-developed when it contains specific details that help explain and illustrate the controlling idea when readers have all the information they need to make sense of the paragraph.<sup>30</sup>The supporting sentence which directly develops the topic sentence is called the major supporting sentence. The one which indirectly develops it but directly develops the major supporting sentence is called

---

<sup>27</sup>Utami Dewi, Op. Cit, p. 33

<sup>28</sup>SanggamSiahaan, (2008), *The English Paragraph*, Yogyakarta: GrahaIlmu, p. 23

<sup>29</sup>Upper Saddle River, Op. Cit, p. 35

<sup>30</sup>Utami Dewi, Op. Cit, p. 39

the minor supporting sentence. All the supporting sentence of a paragraphs are about the topic sentence.<sup>31</sup>

### **5.3.The Concluding Sentence**

A primary purpose of concluding sentence is to get readers out of students' paper. A concluding sentence leave the main point in the end of the paragraph.<sup>32</sup>It usually uses a conclusion transition signal in the end of the essay such as: in conclusion, in summary.

### **5.4.Unity**

Every idea discussed in the paragraph should be adequately explained and supported through evidence and details that work together to explain the paragraph's controlling idea. If you have a sentence that is not directly related to your main topic, your paragraph is concidered to "lack unity" or the sentence is "off topic" and should be removed from the paragraph.<sup>33</sup> Unity only discuss one idea in one paragraph.

### **5.5.Coherence**

Paragraph should aslo be coherent. Coherence means estabilishing a relationship between the ideas the ideaspresented in a paragraph.<sup>34</sup> Coherence also means sticking and holding together. Paragraph coherence refers to the way that ideas hold together in a paragraph. Paragraph coherence begins with clear, precise, focused topic sentence because the topic sentence sets up the expectations the reader has about appropriate related fact, example, details that the writer could use to develop central idea.

---

<sup>31</sup>SanggamSiahaan, Op.Cit, p. 33

<sup>32</sup>Utami Dewi, Op. Cit, p. 46

<sup>33</sup>Utami Dewi, Op. Cit, p. 33

<sup>34</sup>*Ibid*,p. 65

## **5.6.Transitions**

The use of transitions (also called “connectors” in the text) is the most common technique for creating coherence in writing. Transitional words and phrases guide a reader through our writing like street sign helps us to find our way in the city.<sup>35</sup>

## **6. Writing Narrative Paragraph**

Writing narrative paragraph guide the students step by step through the process of writing a paragraph about an experience they have had. There are some steps to write a narrative paragraph as follows:

1. Prewriting: activities help students think about experiences they have had and the people, events, actions, and conversations that took place during those experiences.
2. Writing: activities help students write a topic sentence that gets the reader's attention, body sentences that narrate the event, and an ending sentence that draws the paragraph to a close.
3. Revising: activities help students check the time-order in their paragraphs and use a checklist to make improvements.
4. Editing: activities help students use the right word and check for other errors.
5. Publishing: activities help students create a clean final copy of their paragraphs and reflect on what they have learned.

---

<sup>35</sup>Bob Brannan, Op.Cit, p. 53

## 6. Assessment of Writing

In scoring the written test, the cumulative score ranging from 0-100. To know the students achievement in writing ability, there are some criteria that is considered. According to Brown there are five scoring components scale name: content, organization, vocabulary, language use and mechanics.<sup>36</sup>

Those specific criteria are described in detail in the following stages:

| Components   | Criteria  | Score          |
|--|---|----------------|
| Level  |   |                |
| <b>1. Content</b><br>The score of content depend of the students' ability to write ideas, information in the form of logical sentence.                     | <b>Excellent to very good</b><br>(Knowledge substantive, development of topic sentence, is relevant to and assigned topic.) | <b>30 – 27</b> |
|  | <b>Good to average</b><br>(Some knowledge of subject-adequate range-etc)  |                |
|  | <b>Fair to poor</b><br>(Limited knowledge of subject –little substance-etc)   | <b>21 – 17</b> |
|  | <b>Very poor</b><br>(Does not show knowledge of subject-non-substantive-etc)  | <b>16 – 13</b> |
| <b>2. Organization</b><br>The organization refers to the students' ability to write the ideas, information in good logical order. The topic and supporting | <b>Excellent to very good</b><br>(Fluent expression – ideas clearly stated-etc)   | <b>20 – 18</b> |
|  | <b>Good to average</b><br>(Somewhat choppy –loosely organized but main ideas stand out, etc)                                | <b>17 – 14</b> |

---

<sup>36</sup>Arthur Hughes, (2003), *Testing for Language Teachers (Second Edition)*, Cambridge: Cambridge University Press, p. 104.

|  |  |                |
|--|--|----------------|
| sentences are clearly stated.  | <b>Fair to poor</b><br>(Non fluent – ideas)  | <b>13 – 10</b> |
|  | <b>Fair to poor</b><br>(Non fluent – ideas confused or disconnected – etc)   | <b>13 – 10</b> |
|  | <b>Very poor</b><br>(Does not communicate – no organization – etc)   | <b>9 – 7</b>   |
| <b>3. Vocabulary</b><br>Vocabulary refers to the students' ability in using word or idiom to express idea logically. It also refers to use synonym, antonym, prefix, and suffix exactly.                           | <b>Excellent to very good</b><br>(Sophisticated range – effective word/ idiom choice and usage – etc)                      | <b>20 – 18</b> |
|  | <b>Good to average</b><br>(Adequate range- occasional errors of word/ idiom form, choice, usage but meaning not obscured). | <b>17 – 14</b> |
|  | <b>Fair to poor</b><br>(Limited range–frequent errors of word/ idiom, form, choice, usage – etc)                           | <b>13 – 10</b> |
|  | <b>Fair to poor</b><br>(Limited range–frequent errors of word/ idiom, form, choice, usage – etc)                           | <b>13 – 10</b> |
|  | <b>Very poor</b><br>Essentially translation – little knowledge of English vocabulary                                       | <b>9 – 7</b>   |
| <b>4. Language Use</b><br>Language use refers to the students' ability in writing the sentence, simple, complex, and compound sentence correctly and logically it also refers to the ability to use arrangement in | <b>Excellent to very good</b><br>(Effective complex construction – etc)  | <b>25 – 22</b> |
|  | <b>Good to average</b><br>(Effective but simple constructions – etc)   | <b>21 – 19</b> |
|  | <b>Fair to poor</b><br>(Major problems in simple/ complex constructions – etc)   | <b>17 – 11</b> |



|  |   |               |
|--|---|---------------|
| the sentence and some other words such as nouns, verbs and time signal.  | <b>Very poor</b><br>(Virtually no mastery of sentence construction rules – etc)   | <b>10 – 5</b> |
| <b>5.Mechanism</b><br>Mechanism refers to the students' ability to use words appropriately and function correctly, such as punctuation and spelling. Paragraph and text can be read correctly. | <b>Excellent to very good</b><br>(Demonstrated mastery of conventions – etc)  | <b>5</b>      |
|  | <b>Good to average</b><br>(Occasional errors of spelling, punctuation – etc)  | <b>4</b>      |
|  | <b>Fair to poor</b><br>(Frequent errors of spelling, punctuation, capitalization – etc)   | <b>3</b>      |
|  | <b>Very poor</b><br>(No mastery of conventions –dominated by errors of spelling, punctuation, capitalization, paragraphing – etc) | <b>2</b>      |

## **B. Framework Thinking**

Writing is one of the language skills that should be acquired when learning language. Learning about writing is not only about how to put words in written but also how to pack the idea, message, and information correctly in a text, in a certain criteria. A narrative is a story that is created in a constructive format (as a work of speech, writing, song, film, television, video games, photography or theatre) that describe a sequence of fictional or non-fictional human event.

Narrative often contains a chronological sequence of event, but some narratives contain only a single event or skips around in time.

The teacher can use some strategies in teaching writing narrative. One of them is by using Image Streaming method. In using this method, students are asked to imagine the sequence of the story that they want to write and will be easily to write the story step by step. For the achievements, they will be able to produce a good narrative text.

### **C. Hypothesis**

The research hypothesis is formulated as follows:

$H_0$  = “There is no significant effect of Image Streaming Method on the students’ ability in writing narrative paragraph.”

$H_a$  = “There is a significant effect of Image Streaming Method on the students’ ability in writing narrative paragraph.”

## CHAPTER III

### RESEARCH METHODOLOGY

#### A. Location of Research

This research was conducted at the tenth grade of MAS PAB 2Helvetia Medan in the academic year 2016/2017. It is located on Jalan Veteran Pasar 4 Helvetia Medan. The reason to choose this school based on the researcher's experience during doing teaching at that school, research finds the students have difficulties in writing, especially in writing narrative paragraph.

#### B. Research Design

This study was conducted by using experimental research. In this research, the sample was divided into two groups, namely experimental group and control group. The experimental group was used Image Streaming method while the control group will be used the conventional method.

**Table I. Research Design**

| Groups       | Pre-test | Treatment                       | Post-test |
|--------------|----------|---------------------------------|-----------|
| Experimental | ✓        | By using Image streaming method | ✓         |
| Control      | ✓        | By using Conventional method    | ✓         |

#### C. Population and Sample

##### 1. Population

Population is generalization region consisting of object or subject that has a certain quantity and characteristics defined by the researcher to learn and then

make the conclusion.<sup>37</sup>The population of this research was taken from the students of MAS PAB 2Helvetia in academic year 2016/2017.The population of this research can be seen as follows:

**Table II. Population**

| No.                 | Grade | Total Students |
|---------------------|-------|----------------|
| 1.                  | X-1   | 30 students    |
| 2.                  | X-2   | 30 students    |
| Total of Population |       | 60 Students    |

## 2. Sample

According to Indra Jaya, A sample is the part of the number and characteristic possessed by this population.<sup>38</sup>Researcher take the population as the sample that are 60 students, of those two classes (X-1,and X-2), this research applied total sampling.

## D. Instrument of Collecting Data

For collecting the data, a writing test was given to the students. The tests was administered to the students in both experimental and control group. They are pre-test and post-test. The design of the test is in essay form. The students was instructed to write a narrative paragraph based on the topic given by the researcher. The tests wasgiven to both groups; experimental and control group.

---

<sup>37</sup>Indrajaya, (2013), *PenerapanStatistikUntukPendidikan*, Medan: CiptaPustaka Medan Perintis, p. 20

<sup>38</sup>Indra Jaya, *Ibid*, p. 32

The student's ability in learning narrative paragraph was analyzed by the collecting data in the tests.

### **E. Technique of Collecting Data**

Technique of collecting data is the technique or methods that can be used by researcher for collecting the data. Data collection can be interpreted as research activities in order to gather a number of field data needed to answer the research or test hypotheses.<sup>39</sup> In this research it will be used pre-test, treatment, and post-test.

#### **1. Pre- Test**

The pre-test was administered before treatment. The same pre- test was given to both experimental and control group in order to investigate the students' writing ability. Both experimental and control group were asked to write a narrative paragraph based on the topic given.

#### **2. Treatment**

The treatment will be conducted after pre- test in the experimental group, the students were taught by applying Image Streaming writing method while control group, the students were taught by using conventional method. Both experimental and control group were taught with the same material.

---

<sup>39</sup>Hendryadi, 2016, *Metode Pengumpulan Data*, <http://tepenr06.wordpress.com>, Accessed on 15<sup>th</sup> January 2017

### 3. Post- Test

Post- test was given after the treatment has been completed. It is aimed to get the mean scores of experimental group and control group. It is applied to know the effect of teaching presentation in both groups.

#### **F. Scoring The Test**

There are five scoring scales in scoring writing, namely content, organization, vocabulary, language use and mechanics.<sup>40</sup> The specific criteria are described as follows:

##### **1. Content**

|         |                               |  |
|---------|-------------------------------|--|
| 30 – 27 | <b>Excellent to very good</b> | Knowledge substantive, development of topic sentence, is relevant to and assigned topic. |
| 26 – 22 | <b>Good to average</b>        | Some knowledge of subject-adequate range-etc   |
| 21 – 17 | <b>Fair to poor</b>           | Limited knowledge of subject –little substance-etc                                       |
| 16 – 13 | <b>Very poor</b>              | Does not show knowledge of subject-non-substantive-etc                                   |

##### **2. Organization**

|         |                               |  |
|---------|-------------------------------|--|
| 20 – 18 | <b>Excellent to very good</b> | Fluent expression – ideas clearly stated- etc                    |
| 17 – 14 | <b>Good to average</b>        | Somewhat choppy –loosely organized but main ideas stand out, etc |

---

<sup>40</sup>Arthur Hughes, Op. Cit, p. 104.

13 – 10      **Fair to poor**  
Non fluent – ideas confused or disconnected – etc

9 – 7      **Very poor**  
Does not communicate – no organization – etc

### **3. Vocabulary**

20 – 18      **Excellent to very good**  
Sophisticated range – effective word/ idiom choice and usage – etc

17 – 14      **Good to average**  
Adequate range- occasional errors of word/ idiom form, choice, usage but meaning not obscured.

13 – 10      **Fair to poor**  
Limited range–frequent errors of word/ idiom, form, choice, usage  
- etc

9 – 7      **Very poor**  
Essentially translation – little knowledge of English vocabulary

### **4. Language use**

25 – 22      **Excellent to very good**  
Effective complex construction – etc

21 – 19      **Good to average**  
Effective but simple constructions – etc

17 – 11      **Fair to poor**  
Major problems in simple/ complex constructions – etc

10 – 5      **Very poor**  
Virtually no mastery of sentence construction rules – etc

## 5. Mechanics

### 5                    **Excellent to very good**

Demonstrated mastery of conventions – etc

### 4                    **Good to average**

Occasional errors of spelling, punctuation – etc

### 3                    **Fair to poor**

Frequent errors of spelling, punctuation, capitalization – etc

### 2                    **Very poor**

No mastery of conventions –dominated by errors of spelling, punctuation, capitalization, paragraphing – etc

**Table III. The Rubric to score the students**

| NO | Students' Name | Component |                  |                |                 |               |
|----|----------------|-----------|------------------|----------------|-----------------|---------------|
|    |                | Content   | Organi<br>zation | Vocab<br>ulary | Language<br>use | Mecha<br>nics |
|    |                |           |                  |                |                 |               |

## G. The Technique for Analyzing Data

In order to find the different effect between Experimental and Control Group, the t-test formula was applied. The formula was stated as the following:

$$T\text{-test} = \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$



Where:

T-test = The effect

$\bar{x}_1$  = Mean of Post-test – Pre-test in experimental group

$\bar{x}_2$  = Mean of Post-test – Pre-test in control group

$S_1^2$  = Variant of Pre-test – Post-test in experimental group

$S_2^2$  = Variant of Pre-test – Post-test in control group

$n_1$  = Sample in experimental group

$n_2$  = Sample in control group

## **CHAPTER IV**

### **DATA ANALYSIS AND RESEARCH FINDINGS**

#### **A. The Data**

This study was conducted by applying an experimental research. There were two groups in this research, namely experimental and control group. This research applied a writing test which the total score is 100. The pre test was given before the treatment and the post test was given after the treatment. The researcher gave the treatment to students in the experimental group by applying Image Streaming method while control group without applying Image Streaming method.

From the data were collected the lowest score of pre-test was 40, and the highest score of pre-test was 66 and the mean of pre-test was 53.46. On the other hand the lowest score of post-test was 66, and the highest score of post-test was 88 and the mean of post-test was 77.26. Whereas in control group, showed the lowest score of pre-test was 40, and the highest score of pre-test was 60 and the mean of pre-test was 47.66. On the other hand the lowest score of post-test was 56, and the highest score of post-test was 80 and the mean of post-test was 69.53 (See Appendix I, J).

Based on the explanation above, it shows that the student's score in experimental group was higher than student's score in control group, where in pre-test (53.46) and the score in post-test (77.26). The total score of the mean score in experimental and control group showed that there was significant effect in improvement of student's score between pre-test and post-test.

## B. Data Analysis

### 1. Analyzing the Data by Using T-test Formula

The result of calculation from t-test is made to find out whether the use of Image Streaming method significantly effects the writing ability.

**Table XIV. Mean of Post-Test – Pre-Test in Experimental Group**

| No | Score Post-Test | Score Pre-Test | Decrease |
|----|-----------------|----------------|----------|
| 1  | 78              | 66             | 12       |
| 2  | 80              | 50             | 30       |
| 3  | 78              | 50             | 28       |
| 4  | 78              | 50             | 28       |
| 5  | 78              | 46             | 32       |
| 6  | 78              | 46             | 32       |
| 7  | 66              | 46             | 20       |
| 8  | 78              | 66             | 12       |
| 9  | 78              | 46             | 32       |
| 10 | 80              | 66             | 14       |
| 11 | 66              | 50             | 16       |
| 12 | 78              | 66             | 12       |
| 13 | 78              | 66             | 12       |
| 14 | 88              | 66             | 22       |
| 15 | 80              | 50             | 30       |
| 16 | 78              | 50             | 28       |
| 17 | 88              | 50             | 38       |
| 18 | 78              | 40             | 38       |
| 19 | 66              | 40             | 26       |
| 20 | 78              | 66             | 12       |
| 21 | 66              | 40             | 26       |
| 22 | 66              | 50             | 16       |
| 23 | 78              | 50             | 28       |
| 24 | 80              | 50             | 30       |
| 25 | 78              | 66             | 12       |

|             |    |    |             |
|-------------|----|----|-------------|
| 26          | 66 | 40 | 26          |
| 27          | 88 | 50 | 38          |
| 28          | 80 | 66 | 14          |
| 29          | 78 | 50 | 28          |
| 30          | 88 | 66 | 22          |
| $\Sigma$    |    |    | <b>714</b>  |
| <b>Mean</b> |    |    | <b>23.8</b> |

From the calculation above, the total of decrease from the pre-test and post-test in experimental group is 714. Meanwhile the mean of pre-test and post-test in experimental group is 23.8.

**Table XV. Mean of Post-Test – Pre-Test in Control Group**

| <b>No</b> | <b>Score Post-Test</b> | <b>Score Pre-Test</b> | <b>Decrease</b> |
|-----------|------------------------|-----------------------|-----------------|
| 1         | 68                     | 50                    | 18              |
| 2         | 60                     | 44                    | 16              |
| 3         | 66                     | 48                    | 18              |
| 4         | 66                     | 50                    | 16              |
| 5         | 60                     | 56                    | 4               |
| 6         | 76                     | 56                    | 20              |
| 7         | 76                     | 60                    | 16              |
| 8         | 66                     | 48                    | 18              |
| 9         | 56                     | 44                    | 12              |
| 10        | 60                     | 44                    | 16              |
| 11        | 60                     | 50                    | 10              |
| 12        | 60                     | 50                    | 10              |
| 13        | 66                     | 56                    | 10              |
| 14        | 76                     | 50                    | 26              |
| 15        | 76                     | 60                    | 16              |
| 16        | 66                     | 50                    | 16              |
| 17        | 56                     | 44                    | 12              |
| 18        | 66                     | 44                    | 22              |
| 19        | 56                     | 44                    | 12              |
| 20        | 60                     | 50                    | 10              |
| 21        | 66                     | 50                    | 16              |
| 22        | 76                     | 60                    | 16              |

|             |    |    |              |
|-------------|----|----|--------------|
| 23          | 66 | 60 | 6            |
| 24          | 66 | 50 | 16           |
| 25          | 76 | 66 | 10           |
| 26          | 76 | 66 | 10           |
| 27          | 66 | 56 | 10           |
| 28          | 66 | 56 | 10           |
| 29          | 76 | 66 | 10           |
| 30          | 76 | 66 | 10           |
| Σ           |    |    | <b>412</b>   |
| <b>Mean</b> |    |    | <b>13.73</b> |

From the calculation above, the total of decrease from the pre-test and post-test in control group is 412. Meanwhile the mean of pre-test and post-test in control group is 12.73.

So, the hypothesis testing in this research, it is used two average similarity test by using statistic, as follow:

$$T\text{-test} = \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{S_1^2}{n_1} + \frac{S_2^2}{n_2}}}$$

Where:

$$\bar{x}_1 = 23.80$$

$$\bar{x}_2 = 13.73$$

$$S_1^2 = 48.13$$

$$S_2^2 = 4.69$$

$$n_1 = 30$$

$$n_2 = 30$$

$$\begin{aligned}
t &= \frac{(\bar{x}_1 - \bar{x}_2)}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}} \\
&= \frac{23.80 - 13.73}{\sqrt{\frac{48.13}{30} + \frac{4.69}{30}}} \\
&= \frac{10.07}{1.75} \\
&= 5.754
\end{aligned}$$

From the calculation above, it can be seen that  $t_{\text{observed}} = 5.754$ . The testing hypothesis is conducted in order to find out whether that hypothesis is accepted or rejected. The basis of testing hypothesis is that the  $H_a$  is accepted if the  $t_{\text{observed}} > t_{\text{table}}$ . In this study the calculation of the scores uses t-test for the degree of freedom 58 ( $df = N + N - 2$ ) at the level of significant 0.05 that the critical value is 2.009. So it can be seen that  $t_{\text{table}} = 2.009$ .

## 2. Hypothesis Testing

The basis for testing hypothesis is as following:

The testing hypothesis is conducted in order to find out whether that hypothesis is accepted or rejected. The basis of testing hypothesis is that the  $H_a$  is accepted if the  $t_{\text{observed}} > t_{\text{table}}$ . In this study the calculation of the scores uses t-test for the degree of freedom 58 ( $df = N + N - 2$ ) at the level of significant 0.05 that the critical value is 2.009. So it can be seen that  $t_{\text{table}} = 2.009$ . (See AppendixP)

After the scores were calculated, it was found that in this study the  $t_{\text{observed}}$  is higher than the  $t_{\text{table}}$ . It can be seen as follow:

$$t_{\text{observed}} > t_{\text{table}} (\alpha = 0.05) \text{ with df } 58$$

$$5.754 > 2.009$$

From the result above, it shows that the alternative hypothesis ( $H_a$ ) is accepted and the null hypothesis ( $H_0$ ) is rejected. It means that writing by using Image Streaming method affect student's ability in writing narrative paragraph.

### **C. Research Finding**

There was a significant difference on students' ability in writing narrative paragraph by using Image Streaming method. The students that were taught by Image Streaming method have higher score than were taught by conventional strategy.

From the calculation above it found that  $t_{\text{observed}} = 5.754$  whereas the  $t_{\text{table}} = 2.009$ . It shows that students' ability in writing narrative paragraph by using Image Streaming method was significant at 0.05. From the result, the researcher found that there was significant of the students' ability in writing narrative paragraph that were taught by Image Streaming method. This means that the students' ability in writing narrative paragraph that were taught by Image Streaming method was better than taught by conventional strategy.

## **CHAPTER V**

### **CONCLUSION AND SUGGESTION**

#### **A. Conclusion**

From the data obtained it is seen that the result of the students' ability in writing narrative paragraph by using Image Streaming method is higher than that by using conventional strategy at the tenth grade of MAS PAB 2 Helvetia Medan. Image Streaming method is significant to be used in improving the students' ability in writing narrative paragraph. The result of  $t_{\text{observed}}$  is 5.754 and  $t_{\text{table}}$  is 2.009 ( $t_{\text{observed}} > t_{\text{table}}$ ,  $5.754 > 2.009$ ). It means that  $H_0$  is rejected and  $H_a$  is accepted. There is a significant effect of Image Streaming method on the students' ability in writing narrative paragraph.

#### **B. Suggestion**

Based on the conclusion above, the researcher gives some suggestions as follows:

1. To the principal of MAS PAB 2 Helvetia Medan to motivate the teachers, especially English teacher to teach the students by using Image Streaming method, because the method is effectively increase the students' ability in writing narrative paragraph.
2. To the English teacher to use Image Streaming method or one of the alternative method or strategy to increase the student's ability in writing narrative paragraph in English learning.



3. To other researchers, it can be the alternative method to conduct the research related to the improvement of student's ability in writing narrative paragraph.

Finally, the researcher considers that this study still need validity from the next researcher that has the similar topic with this study.

## REFERENCES

- Belajarpsikologi.com, (2017), *Macam-macam Metode Pembelajaran*,  
<http://belajarpsikologi.com/macam-macam-metode-pembelajaran/>,  
Accessed on 20<sup>th</sup> February 2017
- Brannan, Bob, (2003), *A Writer Workshop (Crafting Paragraphs, Building Essay)*,  
New York: McGraw Hill
- Brown, H. Douglas, (2001), *Language Assessment Principle and Classroom Practices*, San Francisco State University Logman
- Charles, (2016), *Grammar*, <https://www.reference.com>sducation>, Accessed on  
25<sup>th</sup> November 2016
- Dewi, Utami, (2011), *How To Write*, Medan: La-Tansa Press
- Dirgeyasa, (2014), *College Academic Writing: A Genre-Based Perspective*,  
Medan: Unimed Press
- Donald Ary, Lucy C. J., & Chris S., (2010), *Introduction to Research in Education (Eighth Edition)*, USA: Wadsworth Cengage Learning
- Hendryadi, (2016), *metode Pengumpulan Data*, <http://tepenr06.wordpress.com>,  
Accessed on 15<sup>th</sup> January 2017
- Hughes, Arthur, (2003), *Testing for Language Teachers (Second Edition)*,  
Cambridge: Cambridge University Press
- Jaya, Indra, (2013), *Penerapan Statistik Untuk Pendidikan*, Medan: Cipta Pustaka  
Media Perintis
- Saddle, Upper, (2001), *Writing and Grammar Communication in Action*, United  
States: Prentice-Hall
- Siahaan, Sanggam, (2008), *Generic Text Structure*, Yogyakarta: Graha Ilmu
- Siahaan, Sanggam, (2008), *The English Paragraph*, Yogyakarta: Graha Ilmu
- Suharnan, (2005), *Psikologi Kognitif*, Surabaya: Srikandi

Shakir, Muhammad Habib, *The Quran Translation Muhammad HabibShakir English Only*, New York: Tahrike Quran

Win Wenger, (2004), *Project Ranaissance: Image Streaming in Brief*  
<http://www.winwenger.com/imagestr.htm>, Accessed on 22<sup>th</sup> November 2016

Wenger,Win, (2011), *beyond teaching and learning (memadukan Quantum Teaching & Learning)*, Bandung: Nuansa Cet 3

Word Press, (2017), *Pengertian A-Z: Pengertian Metode Pembelajaran*,  
<http://artikel.az.com/pengertian-metode-pembelajaran/>, Accessed on 19<sup>th</sup> February 2017

## **APPENDIX A**

### **PRE TEST**

Name:

Class:

Make a narrative paragraph with theme “My Parents”!

## **APPENDIX B**

### **POST TEST**

Name:

Class:

Make a narrative paragraph with theme “Holiday”!

## **APPENDIX C**

### **KEY ANSWER OF PRE TEST**

Instructions:

Make a narrative paragraph with theme “My Parents”!

Answer:

**My Lovely Parents**

My Dad, the first best guide I could ever get. He is like a coach to me who would push me through extreme conditions while still being gentle with me at all times. My dad is a hard working man and he does not give up easily. He worked from 7 a.m to 6 p.m. He doing the work that various kinds such asa teaching in one of the Madrasas in our village and he also teach the Qur'an in MAN Panyabungan and SMPN 2 Panyabungan. He taught me to follow the path of honesty and integrity and not to be afraid of anything that comes into my way. The words that I will never forget is that you do not forget doing prayer and always read the Qur'an because it will help you wherever you are. He's a very tough guy from outside but he's always there when his beloved ones need help.

My mom. She's a very kind women. She would stay awake all night when i'm sick, would scold me real bad when i make mistakes. She is a multi-talented woman who is my mother, cook, doctor, therapist, economist, Counselor priest, and an inspiration. I have no idea what else she can do, but somehow I feel like she can understand what and how I feel about things in my life even if i don't tell her anything. I feel like she can read my mind. She just needs to peek into my eyes and everything becomes clear to her. Even now she can do that quite easily. My silence speaks to her in a lot of ways i can't even explain.. her actions and gestures always direct me and indicate me if i'm wrong at some place. My mom is like a "Goddess of sacrifice" because he would sacrifice everything for us. I love my parents and I'm thankful to be their child. To be honest, all I have now is because of my parents and their blessings.

## **APPENDIX D**

### **KEY ANSWER OF POST TEST**

Instructions:

Make a narrative paragraph with theme “Holiday”!

Answer:

#### **My Holiday**

In the semester holidays odd years ago, I was not off to nowhere. I just gathered-together family premises only. There, we exchanged joking laughter. I am quite happy with this holiday. Although, just hang out with family only. Time was running as the holiday is almost depleted and at that time, in my house there's activities to nothing. Certainly it was very boring holiday, but in moments of boredom that comes, I am comforted by my elder brother. He is very cute and adorable. He is very funny comedian exceeded in television. At holiday time is almost finished, my mother told me to go to Hutabaringin, my aunt's house there assistive aids. Besides, I also help my aunt in the fields. Although sent to the fields, but this time it was quite exciting holiday.

## **APPENDIX E**

### **LESSON PLAN I (Experimental Group)**

School : MAS PAB 2 Helvetia

Class : X-1

Skill : Writing

Topic : Narrative Paragraph

Allocated time : 2 x 45 minutes

#### **I. Standard Competence**

Students are able to write narrative paragraph in daily life.

#### **II. Basic Competence**

Students are expected to be able to write a narrative paragraph based on their experience.

#### **III. Indicator**

1. Students are able to define writing
2. Students are able to define narrative paragraph
3. Students are able to write their experience in a form of narrative paragraph.

#### **IV. Material**

Narrative paragraph

#### **Social function**

The social function of writing narrative paragraph is to tell the story and experience.



### **Generic Structure**

6. Orientation: Set the scene and introduced the participants
7. Evaluation: A stepping back evaluate the plight
8. Complication: A crisis arises
9. Resolution: The crisis is resolved, for better or worse
10. Reorientation: Optional

### **Language Feature**

6. Focus on specific and usually individualized participants
7. Use of material process (and in this text, behavioral, and verbal process)
8. Use of relational process and Mental process
9. Use of temporal conjunctions and temporal circumstances
10. Using past tense

### **Example**

#### **A Bad Camping**

On July 1<sup>st</sup>, I went camping. I brought my own preparation such as food, tent, etc. I arrived at 07 o'clock in the evening. It was dark. I quickly set up my tent for it began raining. I set off to explore the jungle and I brought some food, matches, ropes, and a flashlight on my knapsack. Next, I looked my tent and after I had walked for about 2 km, I was tired. Then, I found a steep slope. There was no other way so I climbed the slope. Suddenly, one of my ropes was broken and was hooked at a casuarinas tree. I screamed for a help but no one heard me. After a few minutes, I turned on my flashlight. A ranger saw the light and he saved me. He did the first aid and he asked me, "Are you injured?" I answered, "Yes, my

back is in pain.” “I will handle it.” He bandaged my back. After that, he went to the base camp to search for a help. Not taking a long time, he got back with his friend and they carried a litter and put me on. When the morning came, they took me to the nearest hospital. I thanked them. It was a bad experience. I only slept and I thought of my injured back. The nurse asked me, “Are you okay?” “I am a bit unwell”, I replied. I kept on sleeping and I sometimes listened to the music. When the nurse asked, I only smiled. I knew that I was not recovered yet but I led my life cheerfully. Two weeks later, I went back to Jogjakarta.

#### **V. Teaching Method**

- a. Quantum teaching
- b. Image streaming method

#### **VI. Media**

- a. Tape recorder

#### **VII. Teaching and Learning Activities**

| <b>Teacher Activities</b>                                 | <b>Students Activities</b>                      | <b>Time</b> |
|---|---|-------------|
| Opening:  |   |             |
| 1. Greets the students                                    | 1. Greet the teacher                            | 5 minutes   |
| 2. Check the attendance list                              | 2. Answer their names                           |             |
| Main Activities:  |   |             |
| 1. Teacher explains the definition of narrative paragraph | 1. Students listen to the teacher's explanation | 10 minutes  |
|   | 2. Students do the pre-test                     |             |
| 2. Teacher gives the pre-test                             | 3. Students collect the writing                 | 10 minutes  |
| 3. Teacher collects the student's writing                 |   | 5 minutes   |

- |  |   |            |
|--|---|------------|
| 4. Teachers explains about narrative paragraph; generic structure, characteristics, the examples and introduce the image streaming method  | 4. Students listen to the teacher's explanation | 10 minutes |
| 5. Teacher divide the students into a groups. Each groups consit of 7 students.  | 5. Students receive the topic                   |            |
| 6. Teacher gives one topic to the students   |   |            |
| 7. Teacher guide the students to apply Image Streaming method to write the paragraph   | 6. Students did individually                    | 5 minutes  |
| - <b>Ask yourself question:</b> The students were asked a question there are in their mind   |   | 30 minutes |
| - <b>Start the Image Streaming:</b> The students were asked to say and recorded all their imagination in their tape recorder. Each students alternately record what they see in their imagination. So, they had recording consist of their idea. |   |            |
| - <b>Feature questioning:</b> every groups were asked to pick up their idea and choose what they   |   |            |

need and do not need to write.

- **Inductive inference:** The students were asked to relate their idea with the topic.
- **What's the same?** every groups were asked to recheck the same and the different set idea in their recording.
- **Relate:** every groups were asked to relate all the words and sentences with the topic.
- **Debrief:** every groups were asked to write all their ideas in the paper to make a narrative paragraph.

Closing Activities:

1. Teacher gives conclusion about narrative paragraph
1. Students listen to the 15 minutes teacher's conclusion
2. Teacher closes the lesson

### **VIII. Assessment**

Instruction

Make a narrative paragraph with theme "My Parents"!

### **IX. Scoring of the test**

**Content**

|         |                               |
|---------|-------------------------------|
| 30 – 27 | <b>Excellent to very good</b> |
| 26 – 22 | <b>Good to average</b>        |
| 21 – 17 | <b>Fair to poor</b>           |
| 16 – 13 | <b>Very poor</b>              |

**Organization**

|         |                               |
|---------|-------------------------------|
| 20 – 18 | <b>Excellent to very good</b> |
| 17 – 14 | <b>Good to average</b>        |
| 13 – 10 | <b>Fair to poor</b>           |
| 9 – 7   | <b>Very poor</b>              |

**Vocabulary**

|         |                               |
|---------|-------------------------------|
| 20 – 18 | <b>Excellent to very good</b> |
| 17 – 14 | <b>Good to average</b>        |
| 13 – 10 | <b>Fair to poor</b>           |
| 9 – 7   | <b>Very poor</b>              |

**Language use**

|         |                               |
|---------|-------------------------------|
| 25 – 22 | <b>Excellent to very good</b> |
| 21 – 19 | <b>Good to average</b>        |
| 17 – 11 | <b>Fair to poor</b>           |
| 10 – 5  | <b>Very poor</b>              |

**Mechanics**

|   |                               |
|---|-------------------------------|
| 5 | <b>Excellent to very good</b> |
| 4 | <b>Good to average</b>        |
| 3 | <b>Fair to poor</b>           |

2

**Very poor**

**The Rubric to score the students**

| NO | Students' Name | Content | Component        |                |                 |               |
|----|----------------|---------|------------------|----------------|-----------------|---------------|
|    |                |         | Organi<br>zation | Vocab<br>ulary | Language<br>use | Mecha<br>nics |

## **LESSON PLAN II**

### **(Experimental Group)**

School : MAS PAB 2 Helvetia

Class : X-1

Skill : Writing

Topic : Narrative Paragraph

Allocated time : 2 x 45 minutes

#### **X. Standard Competence**

Students are able to write narrative paragraph in daily life.

#### **XI. Basic Competence**

Students are expected to be able to write a narrative paragraph based on their experience.

#### **XII. Indicator**

4. Students are able to define writing
5. Students are able to define narrative paragraph
6. Students are able to write their experience in a form of narrative paragraph.

#### **XIII. Material**

Narrative paragraph

##### **Social function**

The social function of writing narrative paragraph is to tell the story and experience.

##### **Generic Structure**

11. Orientation: Set the scene and introduced the participants

12. Evaluation: A stepping back evaluate the plight
13. Complication: A crisis arises
14. Resolution: The crisis is resolved, for better or worse
15. Reorientation: Optional

### **Language Feature**

11. Focus on specific and usually individualized participants
12. Use of material process (and in this text, behavioral, and verbal process)
13. Use of relational process and Mental process
14. Use of temporal conjunctions and temporal circumstances
15. Using past tense

### **Example**

#### **Friendship**

Anyone needs a best friend in her life time. We need somebody that she can trust and go to with her problems. A best friend should be there for you all the time, no matter what the situation may be. My best friend happens to be my younger sister, Mesra. She is only thirteen months younger than I, so we are very close. She has tough me how to trust people, how to solve my problems, and how to open up and express my feeling. I have always had a hard time learning how to trust people. The one person I found that I could trust with everything was my sister Mesra. I could always go to her and let her know if I had something wrong. She would assure me that she would not tell anyone if I didn't want her to. I knew, all my secret would be safe with her and that nobody find out unless I told them. She has never told anyone a secret that I



told her. Knowing that I could trust my sister with anything helped make our relationship stronger.

#### **XIV. Teaching Method**

- c. Quantum teaching
- d. Image streaming method

#### **XV. Media**

- b. Tape recorder

#### **XVI. Teaching and Learning Activities**

| <b>Teacher Activities</b>   | <b>Students Activities</b>  | <b>Time</b>   |
|---|---|---|
| Opening:<br><br>3. Greets the students<br>4. Check the attendance list  | <br><br>3. Greet the teacher<br>4. Answer their names   | <br><br>5 minutes   |
| Main Activities:<br><br>8. Teacher explains the definition of narrative paragraph<br>9. Teacher gives the pre-test<br>10. Teacher collects the student's writing<br>11. Teachers explains about narrative paragraph; generic structure, characteristics, the examples and introduce the image streaming method<br>12. Teacher divide the students into a groups. Each groups consist of 7 students.<br>13. Teacher gives one topic to | <br><br>7. Students listen to the teacher's explanation<br>8. Students do the pre-test<br>9. Students collect the writing<br><br>10. Students listen to the teacher's explanation<br><br><br>11. Students receive the topic | <br><br>10 minutes<br><br>10 minutes<br>5 minutes<br><br><br>10 minutes |

|   |                                      |                                    |
|---|--------------------------------------|------------------------------------|
| <p>the students</p> <p>14. Teacher guide the students to apply Image Streaming method to write the paragraph</p> <ul style="list-style-type: none"> <li>- <b>Ask yourself question:</b> The students were asked a question there are in their mind</li> <li>- <b>Start the Image Streaming:</b> The students were asked to say and recorded all their imagination in their tape recorder. Each students alternately record what they see in their imagination. So, they had recording consist of their idea.</li> <li>- <b>Feature – questioning:</b> every groups were asked to pick up their idea and choose what they need and do not need to write.</li> <li>- <b>Inductive inference:</b> The students were asked to relate their idea with the topic.</li> <li>- <b>What's the same?</b> every groups were asked to recheck the same and the</li> </ul> | <p>12. Students did individually</p> | <p>5 minutes</p> <p>30 minutes</p> |
|---|--------------------------------------|------------------------------------|

|  |   |                   |
|--|---|-------------------|
| <p>different set idea in their recording.</p> <ul style="list-style-type: none"> <li>- <b>Relate:</b> every groups were asked to relate all the words and sentences with the topic.</li> <li>- <b>Debrief:</b> every groups were asked to write all their ideas in the paper to make a narrative paragraph.</li> </ul> |   |                   |
| <p>Closing Activities:</p> <p>3. Teacher gives conclusion about narrative paragraph</p> <p>4. Teacher closes the lesson</p>  | <p>2. Students listen to the teacher's conclusion</p> | <p>15 minutes</p> |

## **XVII. Assessment**

### **Instruction**

Make a narrative paragraph with theme “Village”!

## **XVIII. Scoring of the test**

### **Content**

30 – 27      **Excellent to very good**

26 – 22      **Good to average**

21 – 17      **Fair to poor**

16 – 13      **Very poor**

### **Organization**

20 – 18      **Excellent to very good**

17 – 14      **Good to average**

13 – 10      **Fair to poor**

9 – 7      **Very poor**

**Vocabulary**

20 – 18      **Excellent to very good**

17 – 14      **Good to average**

13 – 10      **Fair to poor**

9 – 7      **Very poor**

**Language use**

25 – 22      **Excellent to very good**

21 – 19      **Good to average**

17 – 11      **Fair to poor**

10 – 5      **Very poor**

**Mechanics**

5      **Excellent to very good**

4      **Good to average**

3      **Fair to poor**

2      **Very poor**

**The Rubric to score the students**

| NO | Students' Name | Component |                  |                |                 |               |
|----|----------------|-----------|------------------|----------------|-----------------|---------------|
|    |                | Content   | Organi<br>zation | Vocab<br>ulary | Language<br>use | Mecha<br>nics |
|    |                |           |                  |                |                 |               |

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|

## **APPENDIX F**

### **LESSON PLAN I (Control Group)**

School : MAS PAB 2 Helvetia

Class : X-2

Skill : Writing

Topic : Narrative Paragraph

Allocated time : 2 x 45 minutes

#### **I. Standard Competence**

Students are able to write narrative paragraph in daily life

#### **II. Basic Competence**

Students are expected to be able to write a narrative paragraph based on their experience.

#### **III. Indicator**

1. Students are able to define writing
2. Students are able to define narrative paragraph
3. Students are able to write their experience in a form of narrative paragraph.

#### **IV. Material**

Narrative paragraph

#### **Social function**

The social function of writing narrative paragraph is to tell the story and experience.

#### **Generic Structure**

1. Orientation: Set the scene and introduced the participants
2. Evaluation: A stepping back evaluate the plight
3. Complication: A crisis arises
4. Resolution: The crisis is resolved, for better or worse
5. Reorientation: Optional

### **Language Feature**

1. Focus on specific and usually individualized participants
2. Use of material process (and in this text, behavioral, and verbal process)
3. Use of relational process and Mental process
4. Use of temporal conjunctions and temporal circumstances
5. Using past tense

### **Example**

#### **A Bad Camping**

On July 1<sup>st</sup>, I went camping. I brought my own preparation such as food, tent, etc. I arrived at 07 o'clock in the evening. It was dark. I quickly set up my tent for it began raining. I set off to explore the jungle and I brought some food, matches, ropes, and a flashlight on my knapsack. Next, I looked my tent and after I had walked for about 2 km, I was tired. Then, I found a steep slope. There was no other way so I climbed the slope. Suddenly, one of my ropes was broken and was hooked at a casuarinas tree. I screamed for a help but no one heard me. After a few minutes, I turned on my flashlight. A ranger saw the light and he saved me. He did the first aid and he asked me, "Are you injured?" I answered, "Yes, my back is in pain." "I will handle it." He bandaged my back. After that, he went to

the base camp to search for a help. Not taking a long time, he got back with his friend and they carried a litter and put me on. When the morning came, they took me to the nearest hospital. I thanked them. It was a bad experience. I only slept and I thought of my injured back. The nurse asked me, “Are you okay?” “I am a bit unwell”, I replied. I kept on sleeping and I sometimes listened to the music. When the nurse asked, I only smiled. I knew that I was not recovered yet but I led my life cheerfully. Two weeks later, I went back to Jogjakarta.

## **V. Teaching Method**

- a. Conventional method

## **VI. Media**

- a. White board

## **VII. Teaching and Learning Activities**

| <b>Teacher Activities</b>   | <b>Students Activities</b>   | <b>Time</b>  |
|---|--|--|
| Opening:<br><br>1. Greets the students<br>2. Check the attendance list  | <br><br>1. Greet the teacher<br>2. Answer their names  | <br><br>5 minutes                                      |
| Main Activities:<br><br>1. Teacher explains the define of narrative paragraph<br>2. Teacher gives the pre-test<br>3. Teacher collects the student's writing<br>4. Teachers explains the step of an event in a narrative paragraph | <br><br>1. Students listen to the teacher's explanation<br>2. Students do the pre-test<br>3. Students collect the writing<br><br>4. Students listen to the teacher's explanation | <br><br>10 minutes<br><br>10 minutes<br><br>10 minutes |



|  |  |                              |
|--|--|------------------------------|
| 5. Teacher asks the student to write the narrative paragraph   | 5. Students do the assignment                  | 10 minutes<br><br>30 minutes |
| Closing Activities:<br><br>1. Teacher gives conclusion about narrative paragraph<br>2. Teacher closes the lesson | 1. Students listen to the teacher's conclusion | 15 Minutes                   |

### **VIII. Assessment**

Instruction

Make a narrative paragraph with theme “My Parents”!

### **IX. Scoring of the test**

**Content**

30 – 27      **Excellent to very good**

26 – 22      **Good to average**

21 – 17      **Fair to poor**

16 – 13      **Very poor**

**Organization**

20 – 18      **Excellent to very good**

17 – 14      **Good to average**

13 – 10      **Fair to poor**

9 – 7      **Very poor**

**Vocabulary**

20 – 18      **Excellent to very good**

17 – 14      **Good to average**

13 – 10      **Fair to poor**

9 – 7      **Very poor**

**Language use**

25 – 22      **Excellent to very good**

21 – 19      **Good to average**

17 – 11      **Fair to poor**

10 – 5      **Very poor**

**Mechanics**

5      **Excellent to very good**

4      **Good to average**

3      **Fair to poor**

2      **Very poor**

**The Rubric to score the students**

| NO | Students' Name | Component |                  |                |                 |               |
|----|----------------|-----------|------------------|----------------|-----------------|---------------|
|    |                | Content   | Organi<br>zation | Vocab<br>ulary | Language<br>use | Mecha<br>nics |
|    |                |           |                  |                |                 |               |

## **LESSON PLAN II**

### **(Control Group)**

School : MAS PAB 2 Helvetia

Class : X-2

Skill : Writing

Topic : Narrative Paragraph

Allocated time : 2 x 45 minutes

#### **X. Standard Competence**

Students are able to write narrative paragraph in daily life

#### **XI. Basic Competence**

Students are expected to be able to write a narrative paragraph based on their experience.

#### **XII. Indicator**

4. Students are able to define writing
5. Students are able to define narrative paragraph
6. Students are able to write their experience in a form of narrative paragraph.

#### **XIII. Material**

Narrative paragraph

##### **Social function**

The social function of writing narrative paragraph is to tell the story and experience.

##### **Generic Structure**

6. Orientation: Set the scene and introduced the participants

7. Evaluation: A stepping back evaluate the plight
8. Complication: A crisis arises
9. Resolution: The crisis is resolved, for better or worse
10. Reorientation: Optional

### **Language Feature**

6. Focus on specific and usually individualized participants
7. Use of material process (and in this text, behavioral, and verbal process)
8. Use of relational process and Mental process
9. Use of temporal conjunctions and temporal circumstances
10. Using past tense

### **Example**

#### Friendship

Anyone needs a best friend in her life time. We need somebody that she can trust and go to with her problems. A best friend should be there for you all the time, no matter what the situation may be. My best friend happens to be my younger sister, Mesra. She is only thirteen months younger than I, so we are very close. She has tough me how to trust people, how to solve my problems, and how to open up and express my feeling. I have always had a hard time learning how to trust people. The one person I found that I could trust with everything was my sister Mesra. I could always go to her and let her know if I had something wrong. She would assure me that she would not tell anyone if I didn't want her to. I knew, all my secret would be safe with her and that nobody find out unless I told them. She has never told anyone a secret that I

told her. Knowing that I could trust my sister with anything helped make our relationship stronger.

#### **XIV. Teaching Method**

- b. Conventional method

#### **XV. Media**

- b. White board

#### **XVI. Teaching and Learning Activities**

| <b>Teacher Activities</b>  | <b>Students Activities</b>                      | <b>Time</b> |
|--|---|-------------|
| Opening:   |   |             |
| 3. Greets the students<br>4. Check the attendance list             | 3. Greet the teacher<br>4. Answer their names   | 5 minutes   |
| Main Activities:   |   |             |
| 6. Teacher explains the define of narrative paragraph              | 6. Students listen to the teacher's explanation | 10 minutes  |
| 7. Teacher gives the pre-test                                      | 7. Students do the pre-test                     | 10 minutes  |
| 8. Teacher collects the student's writing                          | 8. Students collect the writing                 | 10 minutes  |
| 9. Teachers explains the step of an event in a narrative paragraph | 9. Students listen to the teacher's explanation | 10 minutes  |
| 10. Teacher asks the student to write the narrative paragraph      | 10. Students do the assignment                  | 30 minutes  |
| Closing Activities:  |   |             |
| 3. Teacher gives conclusion  | 2. Students listen to the                       | 16 minutes  |

|                              |                      |  |
|------------------------------|----------------------|--|
| about narrative paragraph    | teacher's conclusion |  |
| 4. Teacher closes the lesson |                      |  |

## **XVII. Assessment**

Instruction

Make a narrative paragraph with theme “Village”!

## **XVIII. Scoring of the test**

**Content**

30 – 27      **Excellent to very good**

26 – 22      **Good to average**

21 – 17      **Fair to poor**

16 – 13      **Very poor**

**Organization**

20 – 18      **Excellent to very good**

17 – 14      **Good to average**

13 – 10      **Fair to poor**

9 – 7      **Very poor**

**Vocabulary**

20 – 18      **Excellent to very good**

17 – 14      **Good to average**

13 – 10      **Fair to poor**

9 – 7      **Very poor**

**Language use**

25 – 22      **Excellent to very good**

21 – 19      **Good to average**

17 – 11      **Fair to poor**

10 – 5      **Very poor**

**Mechanics**

5      **Excellent to very good**

4      **Good to average**

3      **Fair to poor**

2      **Very poor**

**The Rubric to score the students**

| NO | Students' Name | Component |                  |                |                 |               |
|----|----------------|-----------|------------------|----------------|-----------------|---------------|
|    |                | Content   | Organi<br>zation | Vocab<br>ulary | Language<br>use | Mecha<br>nics |
|    |                |           |                  |                |                 |               |

## **APPENDIX G**

### **THE STUDENTS' INITIAL AND REAL NAME OF EXPERIMENTAL GROUP (X-1)**

| <b>No</b> | <b>Initial Name</b> | <b>Real Name</b>      |
|-----------|---------------------|-----------------------|
| 1         | AIN                 | Ahmad Irfan Nst       |
| 2         | AAY                 | Aji Akbar Yustito     |
| 3         | AAL                 | Amanda Agustina Lbs   |
| 4         | BDP                 | Bagus Dwi Putra       |
| 5         | CSH                 | Chandra Sentosa Hrp   |
| 6         | DP                  | Diah Pramesti         |
| 7         | DF                  | Dian Fahmi            |
| 8         | DHL                 | Duriatun Habib Lutvia |
| 9         | EWN                 | Eka Widya Ningsih     |
| 10        | EF                  | Era Fazirah           |
| 11        | FA                  | Fiqri Alviansyah      |
| 12        | IFIS                | Ihza Fachrul Imam S   |
| 13        | KAL                 | Kiki Ardiansyah Lbs   |
| 14        | LAN                 | Latifah Aini Nst      |
| 15        | M                   | Melysa                |
| 16        | MA                  | Muhammad Aditya       |
| 17        | MIN                 | Muhammad Ilham Nst    |



|    |      |                         |
|----|------|-------------------------|
| 18 | MRR  | Muhammad Rizky Ramadhan |
| 19 | MSR  | Muhammad Sahrul R       |
| 20 | NA   | Najimi Arisyi           |
| 21 | NF   | Nur Fadila              |
| 22 | NJP  | Nur Janna Pane          |
| 23 | NAN  | Nurwinda Aulia Nst      |
| 24 | PAKS | Putri Ayu Kurnia Sari   |
| 25 | QA   | Qurratul A'yun          |
| 26 | RP   | Rahmatsyah Putra        |
| 27 | RL   | Rudi Luqman             |
| 28 | SS   | Safira Sultanah         |
| 29 | SRAL | Siti Rahmah Afroh Lbs   |
| 30 | S    | Susanti                 |

## **APPENDIX H**

### **THE STUDENTS' INITIAL AND REAL NAME OF CONTROL GROUP (X-2)**

| <b>No</b> | <b>Initial Name</b> | <b>Real Name</b>         |
|-----------|---------------------|--------------------------|
| 1         | AMP                 | Abdi Mahabbah P          |
| 2         | AD                  | Afuza Dalila             |
| 3         | ADH                 | Ahmad Dhani Harahap      |
| 4         | AS                  | Arbima Suhari            |
| 5         | BS                  | Bayu Syahputra           |
| 6         | DPA                 | Delvi Putri Agustin      |
| 7         | DPS                 | Dian Permata Sari        |
| 8         | ES                  | Elsa Savitri             |
| 9         | FR                  | Fahrul Rozi              |
| 10        | IAA                 | Iga Aulia Afrillani      |
| 11        | K                   | Khairunnisa'             |
| 12        | LS                  | Laily Shofa              |
| 13        | LS                  | Legianto Siregar         |
| 14        | M                   | Mayadhita                |
| 15        | MH                  | Miftahul Husni           |
| 16        | M                   | Muchlisin                |
| 17        | MARH                | Muhammad Adjie Rizky Hsb |

|    |      |                         |
|----|------|-------------------------|
| 18 | MIS  | Muhammad Iwan Syahputra |
| 19 | NAMS | Nur Arsih Melinda       |
| 20 | N    | Nurhaniyah              |
| 21 | NIB  | Nurul Ilmi Bukit        |
| 22 | PESN | Putri Elvita Sari Nst   |
| 23 | RA   | Rafida Adilla           |
| 24 | RNF  | Risa Nur Fadillah       |
| 25 | RA   | Rofi Amirza             |
| 26 | SS   | Safrida Sari            |
| 27 | SR   | Septian Syahrozy        |
| 28 | SM   | Siti Marhamah           |
| 29 | SN   | Siti Nurhalizah         |
| 30 | SR   | Suci Ramadhani          |

## APPENDIX I

**Table IV**  
**The Score of Pre Test and Post Test of Experimental Group**

| <b>No.</b> | <b>Students' Initial</b> | <b>Pre Test</b> | <b>Post Test</b> |
|------------|--------------------------|-----------------|------------------|
| 1          | AIN                      | 66              | 78               |
| 2          | AAY                      | 50              | 80               |
| 3          | AAL                      | 50              | 78               |
| 4          | BDP                      | 50              | 78               |
| 5          | CSH                      | 46              | 78               |
| 6          | DP                       | 46              | 78               |
| 7          | DF                       | 46              | 66               |
| 8          | DHL                      | 66              | 78               |
| 9          | EWN                      | 46              | 78               |
| 10         | EF                       | 66              | 80               |
| 11         | FA                       | 50              | 66               |
| 12         | IFIS                     | 66              | 78               |
| 13         | KAL                      | 66              | 78               |
| 14         | LAN                      | 66              | 88               |
| 15         | M                        | 50              | 80               |
| 16         | MA                       | 50              | 78               |
| 17         | MIN                      | 50              | 88               |
| 18         | MRR                      | 40              | 78               |
| 19         | MSR                      | 40              | 66               |
| 20         | NA                       | 66              | 78               |
| 21         | NF                       | 40              | 66               |
| 22         | NJP                      | 50              | 66               |
| 23         | NAN                      | 50              | 78               |
| 24         | PAKS                     | 50              | 80               |
| 25         | QA                       | 66              | 78               |
| 26         | RP                       | 40              | 66               |
| 27         | RL                       | 50              | 88               |

| <b>No.</b>   | <b>Students' Initial</b> | <b>Pre Test</b> | <b>Post Test</b> |
|--------------|--------------------------|-----------------|------------------|
| 28           | SS                       | 66              | 80               |
| 29           | SRAL                     | 50              | 78               |
| 30           | S                        | 66              | 88               |
| <b>Total</b> |                          | <b>= 1604</b>   | <b>= 2318</b>    |
| <b>Mean</b>  |                          | <b>53.46</b>    | <b>77.26</b>     |

Based on the data above, the result of total of decrease in Pre-test is 1604 and the mean is 53.46. Meanwhile the total of decreases of post-test is 2318, and the mean is 77.26.

## APPENDIX J

**Table V**  
**The Score of Pre Test and Post Test of Control Group**

| No.          | Students' Initial | Pre Test      | Post Test     |
|--------------|-------------------|---------------|---------------|
| 1            | AMP               | 50            | 68            |
| 2            | AD                | 44            | 60            |
| 3            | ADH               | 48            | 66            |
| 4            | AS                | 50            | 66            |
| 5            | BS                | 56            | 60            |
| 6            | DPA               | 56            | 76            |
| 7            | DPS               | 60            | 76            |
| 8            | ES                | 48            | 66            |
| 9            | FR                | 44            | 56            |
| 10           | IAA               | 44            | 60            |
| 11           | K                 | 50            | 60            |
| 12           | LS                | 50            | 60            |
| 13           | LS                | 56            | 66            |
| 14           | M                 | 50            | 76            |
| 15           | MH                | 60            | 76            |
| 16           | M                 | 50            | 66            |
| 17           | MARH              | 44            | 56            |
| 18           | MIS               | 44            | 66            |
| 19           | NAMS              | 44            | 56            |
| 20           | N                 | 50            | 60            |
| 21           | NIB               | 50            | 66            |
| 22           | PESN              | 60            | 76            |
| 23           | RA                | 60            | 66            |
| 24           | RNF               | 50            | 66            |
| 25           | RA                | 66            | 76            |
| 26           | SS                | 66            | 76            |
| 27           | SR                | 56            | 66            |
| 28           | SM                | 56            | 66            |
| 29           | SN                | 66            | 76            |
| 30           | SR                | 66            | 76            |
| <b>Total</b> |                   | <b>= 1594</b> | <b>= 2006</b> |
| <b>Mean</b>  |                   | <b>53.13</b>  | <b>66.86</b>  |

Based on the data above, the result of total of decrease in Pre-test is 1594 and the mean is 53.13. Meanwhile the total of decreases of post-test is 2006, and the mean is 66.86.

## APPENDIX K

### Normality Testing of Experimental Group

**Table VI**  
**Frequency Distribution of Pre Test in Experimental Group**

| NO           | Xi | Fi        | FiXi        | Xi <sup>2</sup> | FiXi <sup>2</sup> |
|--------------|----|-----------|-------------|-----------------|-------------------|
| 1            | 40 | 4         | 160         | 1600            | 6400              |
| 2            | 46 | 4         | 184         | 2116            | 8464              |
| 3            | 50 | 12        | 600         | 2500            | 30000             |
| 4            | 66 | 10        | 660         | 4356            | 43560             |
| <b>Total</b> |    | <b>30</b> | <b>1604</b> | <b>10572</b>    | <b>88424</b>      |

Based on the data above, the result of  $F_i X_i^2$  is 88424 and  $F_i X_i$  is 1604.

Then the following is the calculation of mean, variant and standard deviation.

#### a. Mean

$$\bar{x} = \frac{\sum F_i X_i}{\sum F_i}$$

Where:

$\bar{x}$  = Mean of variable x

$F_i X_i$  = Total number of score

$F_i$  = Number of sample

So,

$$\bar{x} = \frac{\sum F_i X_i}{\sum F_i}$$

$$= \frac{1604}{30}$$

$$= 53.46$$

### b. Variant

Where:

$$S^2 = \text{Variant}$$

$$N = \text{Number of sample}$$

So,

$$\begin{aligned} S^2 &= \frac{n \sum F_i X_i^2 - (\sum F_i X_i)^2}{n(n-1)} \\ &= \frac{30 \times 88424 - (1604)^2}{30(30-1)} \\ &= \frac{2652720 - 2572818}{30(29)} \\ &= \frac{79904}{870} \\ &= 91.84 \end{aligned}$$

### c. Standard Deviation

$$\begin{aligned} S &= \sqrt{S^2} \\ &= \sqrt{91.84} \\ &= 9.58 \end{aligned}$$

After getting the calculation of mean, variant and deviation standard, then the next step is to found out the normality of the test. It means that the test was given to the students is observed by Liliefors test. The calculation of normality writing descriptive text can be seen in the following table:

**Table VII**  
**Normality Testing of Pre Test in Experimental Group**

| No | Score | Zi    | F(Zi) | S(Zi) | F(Zi) - S(Zi) |
|----|-------|-------|-------|-------|---------------|
| 1  | 40    | -1.41 | 0.080 | 0.13  | -0.050        |
| 2  | 40    | -1.41 | 0.080 | 0.13  | -0.050        |
| 3  | 40    | -1.41 | 0.080 | 0.13  | -0.050        |



|              |              |                    |       |      |        |
|--------------|--------------|--------------------|-------|------|--------|
| 4            | 40           | -1.41              | 0.080 | 0.13 | -0.050 |
| 5            | 46           | -0.78              | 0.218 | 0.26 | -0.042 |
| 6            | 46           | -0.78              | 0.218 | 0.26 | -0.042 |
| 7            | 46           | -0.78              | 0.218 | 0.26 | -0.042 |
| 8            | 46           | -0.78              | 0.218 | 0.26 | -0.042 |
| 9            | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 10           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 11           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 12           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 13           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 14           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 15           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 16           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 17           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 18           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 19           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 20           | 50           | -0.36              | 0.359 | 0.66 | -0.301 |
| 21           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 22           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 23           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 24           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 25           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 26           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 27           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 28           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 29           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
| 30           | 66           | 1.31               | 0.905 | 1.00 | -0.095 |
|              |              |                    |       |      |        |
| <b>Total</b> | <b>1604</b>  | <b>Lo = -0.042</b> |       |      |        |
| <b>Mean</b>  | <b>53.47</b> | <b>Lt = 0.029</b>  |       |      |        |

**a. Finding Z score**

$$\text{Formula: } Z_i = \frac{X_i - \bar{X}}{s}$$

$$Z_{i1} = \frac{40 - 53.47}{9.58} = -1.41$$

$$Z_{i2} = \frac{46 - 53.47}{9.58} = -0.78$$

$$Z_{i3} = \frac{50 - 53.47}{9.58} = -0.36$$

$$Z_{i4} = \frac{66 - 53.47}{9.58} = 1.31$$

**b. Finding S(Z<sub>i</sub>)**

$$S(Z_i) = \frac{F_{Kum}}{N}$$

$$\frac{4}{30} = 0.13$$

$$\frac{8}{30} = 0.26$$

$$\frac{20}{30} = 0.66$$

$$\frac{30}{30} = 1.00$$

From the table above, it can be seen that Liliefors observation or  $L_o = -0.042$  with  $n = 30$  and at real level  $\alpha = 0.05$  from the list of critical value of Liliefors table  $L_t = 0.029$ . It is known that the coefficient of  $L_o (-0.042) < L_t(0.029)$ . So it can be concluded that the data distribution of the student's ability in writing descriptive text is **normal**.

**Table VIII**

**Frequency Distribution of Post Test in Experimental Group**

| NO | Xi | Fi | FiXi | Xi <sup>2</sup> | FiXi <sup>2</sup> |
|----|----|----|------|-----------------|-------------------|
| 1  | 66 | 6  | 396  | 4356            | 26136             |
| 2  | 78 | 15 | 1170 | 6084            | 91260             |
| 3  | 80 | 5  | 400  | 6400            | 32000             |
| 4  | 88 | 4  | 352  | 7744            | 30976             |

|              |           |             |              |               |
|--------------|-----------|-------------|--------------|---------------|
| <b>Total</b> | <b>30</b> | <b>2318</b> | <b>24584</b> | <b>180372</b> |
|--------------|-----------|-------------|--------------|---------------|

Based on the data above, the result of  $F_i X_i^2$  is 180372 and  $F_i X_i$  is 2318.

Then the following is the calculation of mean, variant and standard deviation.

**a. Mean**

$$\bar{x} = \frac{\sum F_i X_i}{\sum F_i}$$

Where:

$\bar{x}$  = Mean of variable x

$F_i X_i$  = Total number of score

$F_i$  = Number of sample

So,

$$\begin{aligned}\bar{x} &= \frac{\sum F_i X_i}{\sum F_i} \\ &= \frac{2318}{30} \\ &= 77.26\end{aligned}$$

**b. Variant**

Where:

$S^2$  = Variant

N = Number of sample

So,

$$\begin{aligned}S^2 &= \frac{n \sum F_i X_i^2 - (\sum F_i X_i)^2}{n(n-1)} \\ &= \frac{30 \times 180372 - (2318)^2}{30(30-1)} \\ &= \frac{5411160 - 5373124}{30(29)}\end{aligned}$$

$$= \frac{38036}{870}$$

$$= 43.71$$

**c. Standard Deviation**

$$S = \sqrt{S^2}$$

$$= \sqrt{43.71}$$

$$= 6.61$$

After getting the calculation of mean, variant and deviation standard, then the next step is to found out the normality of the test. It means that the test was given to the students is observed by Liliefors test. The calculation of normality writing descriptive text can be seen in the following table:

**Table IX**  
**Normality Testing of Post Test in Experimental Group**

| No | Score | Zi    | F(Zi) | S(Zi) | F(Zi) - S(Zi) |
|----|-------|-------|-------|-------|---------------|
| 1  | 66    | -1.70 | 0.044 | 0.20  | -0.156        |
| 2  | 66    | -1.70 | 0.044 | 0.20  | -0.156        |
| 3  | 66    | -1.70 | 0.044 | 0.20  | -0.156        |
| 4  | 66    | -1.70 | 0.044 | 0.20  | -0.156        |
| 5  | 66    | -1.70 | 0.044 | 0.20  | -0.156        |
| 6  | 66    | -1.70 | 0.044 | 0.20  | -0.156        |
| 7  | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 8  | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 9  | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 10 | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 11 | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 12 | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 13 | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 14 | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 15 | 78    | 0.11  | 0.544 | 0.70  | -0.156        |
| 16 | 78    | 0.11  | 0.544 | 0.70  | -0.156        |

|              |              |                    |       |      |        |
|--------------|--------------|--------------------|-------|------|--------|
| 17           | 78           | 0.11               | 0.544 | 0.70 | -0.156 |
| 18           | 78           | 0.11               | 0.544 | 0.70 | -0.156 |
| 19           | 78           | 0.11               | 0.544 | 0.70 | -0.156 |
| 20           | 78           | 0.11               | 0.544 | 0.70 | -0.156 |
| 21           | 78           | 0.11               | 0.544 | 0.70 | -0.156 |
| 22           | 80           | 0.41               | 0.660 | 0.86 | -0.200 |
| 23           | 80           | 0.41               | 0.660 | 0.86 | -0.200 |
| 24           | 80           | 0.41               | 0.660 | 0.86 | -0.200 |
| 25           | 80           | 0.41               | 0.660 | 0.86 | -0.200 |
| 26           | 80           | 0.41               | 0.660 | 0.86 | -0.200 |
| 27           | 88           | 1.62               | 0.948 | 1.00 | -0.052 |
| 28           | 88           | 1.62               | 0.948 | 1.00 | -0.052 |
| 29           | 88           | 1.62               | 0.948 | 1.00 | -0.052 |
| 30           | 88           | 1.62               | 0.948 | 1.00 | -0.052 |
|              |              |                    |       |      |        |
| <b>Total</b> | <b>2318</b>  | <b>Lo = -0.052</b> |       |      |        |
| <b>Mean</b>  | <b>77.27</b> | <b>Lt = 0.029</b>  |       |      |        |

**a. Finding Z score**

$$\text{Formula: } Z_i = \frac{X_i - \bar{X}}{s}$$

$$Z_{i1} = \frac{66 - 77.27}{6.61} = -1.70$$

$$Z_{i2} = \frac{78 - 77.27}{6.61} = 0.11$$

$$Z_{i3} = \frac{80 - 77.27}{6.61} = 0.41$$

$$Z_{i4} = \frac{88 - 77.27}{6.61} = 1.62$$

**b. Finding S(Z<sub>i</sub>)**

$$S(Z_i) = \frac{F_{Kum}}{N}$$

$$\frac{6}{30} = 0.2$$

$$\frac{21}{30} = 0.7$$

$$\frac{26}{30} = 0.86$$

$$\frac{30}{30} = 1.0$$

From the table above, it can be seen that Liliefors observation or  $L_o = -0.052$  with  $n = 30$  and at real level  $\alpha = 0.05$  from the list of critical value of Liliefors table  $L_t = 0.029$ . It is known that the coefficient of  $L_o (-0.052) < L_t (0.029)$ . So it can be concluded that the data distribution of the student's ability in writing descriptive text is **normal**.

#### Normality Testing of Control Group

**Table X**  
**Frequency Distribution of Pre Test in Control Group**

| NO           | $X_i$ | $F_i$     | $F_i X_i$   | $X_i^2$      | $F_i X_i^2$  |
|--------------|-------|-----------|-------------|--------------|--------------|
| 1            | 44    | 6         | 264         | 1936.00      | 11616        |
| 2            | 48    | 2         | 96          | 2304.00      | 4608         |
| 3            | 50    | 9         | 450         | 2500.00      | 22500        |
| 4            | 56    | 5         | 280         | 3136.00      | 15680        |
| 5            | 60    | 4         | 240         | 3600.00      | 14400        |
| 6            | 66    | 4         | 264         | 4356.00      | 17424        |
| <b>Total</b> |       | <b>30</b> | <b>1594</b> | <b>17832</b> | <b>86228</b> |

Based on the data above, the result of  $F_i X_i^2$  is 86228 and  $F_i X_i$  is 1594.

Then the following is the calculation of mean, variant and standard deviation.

##### a. Mean

$$\bar{x} = \frac{\sum F_i X_i}{\sum F_i}$$

Where:

$\bar{x}$  = Mean of variable x

$F_i X_i$  = Total number of score

$F_i$  = Number of sample

So,

$$\begin{aligned}\bar{x} &= \frac{\sum F_i X_i}{\sum F_i} \\ &= \frac{1594}{30} \\ &= 53.13\end{aligned}$$

#### **b. Variant**

Where:

$S^2$  = Variant

$N$  = Number of sample

So,

$$\begin{aligned}S^2 &= \frac{n \sum F_i X_i^2 - (\sum F_i X_i)^2}{n(n-1)} \\ &= \frac{30 \times 86228 - (1594)^2}{30(30-1)} \\ &= \frac{2586840 - 2540836}{30(29)} \\ &= \frac{46004}{870} \\ &= 52.87\end{aligned}$$

#### **c. Standard Deviation**

$$\begin{aligned}S &= \sqrt{S^2} \\ &= \sqrt{52.87} \\ &= 7.27\end{aligned}$$

After getting the calculation of mean, variant and deviation standard, then the next step is to found out the normality of the test. It means that the test was given to the students is observed by Liliefors test. The calculation of normality writing descriptive text can be seen in the following table:

**Table XI**  
**Normality Testing of Pre Test in Control Group**

| No | Score | Zi    | F(Zi) | S(Zi) | F(Zi) - S(Zi) |
|----|-------|-------|-------|-------|---------------|
| 1  | 44    | -1.26 | 0.105 | 0.20  | -0.095        |
| 2  | 44    | -1.26 | 0.105 | 0.20  | -0.095        |
| 3  | 44    | -1.26 | 0.105 | 0.20  | -0.095        |
| 4  | 44    | -1.26 | 0.105 | 0.20  | -0.095        |
| 5  | 44    | -1.26 | 0.105 | 0.20  | -0.095        |
| 6  | 44    | -1.26 | 0.105 | 0.20  | -0.095        |
| 7  | 48    | -0.71 | 0.240 | 0.26  | -0.020        |
| 8  | 48    | -0.71 | 0.240 | 0.26  | -0.020        |
| 9  | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 10 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 11 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 12 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 13 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 14 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 15 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 16 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 17 | 50    | -0.43 | 0.333 | 0.56  | -0.227        |
| 18 | 56    | 0.39  | 0.653 | 0.73  | -0.077        |
| 19 | 56    | 0.39  | 0.653 | 0.73  | -0.077        |
| 20 | 56    | 0.39  | 0.653 | 0.73  | -0.077        |
| 21 | 56    | 0.39  | 0.653 | 0.73  | -0.077        |
| 22 | 56    | 0.39  | 0.653 | 0.73  | -0.077        |



|              |              |                    |       |      |        |
|--------------|--------------|--------------------|-------|------|--------|
| 23           | 60           | 0.94               | 0.828 | 0.86 | -0.032 |
| 24           | 60           | 0.94               | 0.829 | 0.86 | -0.032 |
| 25           | 60           | 0.94               | 0.829 | 0.86 | -0.032 |
| 26           | 60           | 0.94               | 0.829 | 0.86 | -0.032 |
| 27           | 66           | 1.77               | 0.962 | 1.00 | -0.038 |
| 28           | 66           | 1.77               | 0.962 | 1.00 | -0.038 |
| 29           | 66           | 1.77               | 0.962 | 1.00 | -0.038 |
| 30           | 66           | 1.77               | 0.962 | 1.00 | -0.038 |
|              |              |                    |       |      |        |
| <b>Total</b> | <b>1594</b>  | <b>Lo = -0.020</b> |       |      |        |
| <b>Mean</b>  | <b>53.13</b> | <b>Lt = 0.029</b>  |       |      |        |

**a. Finding Z score**

$$\text{Formula: } Z_i = \frac{X_i - \bar{X}}{s}$$

$$Z_{i1} = \frac{44 - 53.13}{7.27} \approx -1.26$$

$$Z_{i2} = \frac{48 - 53.13}{7.27} \approx -0.71$$

$$Z_{i3} = \frac{50 - 53.13}{7.27} \approx -0.43$$

$$Z_{i4} = \frac{56 - 53.13}{7.27} \approx 0.39$$

$$Z_{i5} = \frac{60 - 53.13}{7.27} \approx 0.94$$

$$Z_{i6} = \frac{66 - 53.13}{7.27} \approx 1.77$$

**b. Finding S(Z<sub>i</sub>)**

$$S(Z_i) = \frac{F_{Kum}}{N}$$

$$\frac{6}{30} = 0.20$$

$$\frac{8}{30} = 0.26$$

$$\frac{17}{30} = 0.56$$

$$\frac{22}{30} = 0.73$$

$$\frac{26}{30} = 0.86$$

$$\frac{30}{30} = 1.00$$

From the table above, it can be seen that Liliefors observation or  $L_o = -0.020$  with  $n = 30$  and at real level  $\alpha = 0.05$  from the list of critical value of Liliefors table  $L_t = 0.029$ . It is known that the coefficient of  $L_o (-0.020) < L_t (0.029)$ . So it can be concluded that the data distribution of the student's ability in writing descriptive text is **normal**.

**Table XII**

**Frequency Distribution of Post Test in Control Group**

| NO | Xi | Fi        | FiXi        | Xi <sup>2</sup> | FiXi <sup>2</sup> |
|----|----|-----------|-------------|-----------------|-------------------|
| 1  | 56 | 3         | 168         | 3136            | 9408              |
| 2  | 60 | 6         | 360         | 3600            | 21600             |
| 3  | 66 | 11        | 726         | 4356            | 47916             |
| 4  | 68 | 1         | 68          | 4624            | 4624              |
| 5  | 76 | 9         | 684         | 5776            | 51984             |
|    |    | <b>30</b> | <b>2006</b> | <b>21492</b>    | <b>135532</b>     |

Based on the data above, the result of  $F_i X_i^2$  is 146828 and  $F_i X_i$  is 2086.

Then the following is the calculation of mean, variant and standard deviation.

**a. Mean**

$$\bar{x} = \frac{\sum F_i X_i}{\sum F_i}$$

Where:

$$\bar{x} = \text{Mean of variable } x$$

$F_i X_i$  = Total number of score

$F_i$  = Number of sample

So,

$$\bar{x} = \frac{\sum F_i X_i}{\sum F_i}$$

$$= \frac{2006}{30}$$

$$= 66.86$$

#### d. Variant

Where:

$S^2$  = Variant

$N$  = Number of sample

So,

$$S^2 = \frac{n \sum F_i X_i^2 - (\sum F_i X_i)^2}{n(n-1)}$$

$$= \frac{30 \times 135532 - (2006)^2}{30(30-1)}$$

$$= \frac{4065960 - 4024036}{30(29)}$$

$$= \frac{41924}{870}$$

$$= 48.18$$

#### e. Standard Deviation

$$S = \sqrt{S^2}$$

$$= \sqrt{48.18}$$

$$= 6.94$$

After getting the calculation of mean, variant and deviation standard, then the next step is to found out the normality of the test. It means that the test was given to the students is observed by Liliefors test. The calculation of normality writing descriptive text can be seen in the following table:

**Table XIII**  
**Normality Testing of Post Test in Control Group**

| No | Score | Zi    | F(Zi) | S(Zi) | F(Zi) - S(Zi) |
|----|-------|-------|-------|-------|---------------|
| 1  | 56    | -1.56 | 0.059 | 0.10  | -0.041        |
| 2  | 56    | -1.56 | 0.059 | 0.10  | -0.041        |
| 3  | 56    | -1.56 | 0.059 | 0.10  | -0.041        |
| 4  | 60    | -0.99 | 0.161 | 0.30  | -0.139        |
| 5  | 60    | -0.99 | 0.161 | 0.30  | -0.139        |
| 6  | 60    | -0.99 | 0.161 | 0.30  | -0.139        |
| 7  | 60    | -0.99 | 0.161 | 0.30  | -0.139        |
| 8  | 60    | -0.99 | 0.161 | 0.30  | -0.139        |
| 9  | 60    | -0.99 | 0.161 | 0.30  | -0.139        |
| 10 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 11 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 12 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 13 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 14 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 15 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 16 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 17 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 18 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 19 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 20 | 66    | -0.12 | 0.451 | 0.66  | -0.209        |
| 21 | 68    | 0.16  | 0.565 | 0.70  | -0.135        |
| 22 | 76    | 1.32  | 0.906 | 1.00  | -0.094        |
| 23 | 76    | 1.32  | 0.906 | 1.00  | -0.094        |
| 24 | 76    | 1.32  | 0.906 | 1.00  | -0.094        |
| 25 | 76    | 1.32  | 0.906 | 1.00  | -0.094        |

|              |              |                   |       |      |        |
|--------------|--------------|-------------------|-------|------|--------|
| 26           | 76           | 1.32              | 0.906 | 1.00 | -0.094 |
| 27           | 76           | 1.32              | 0.906 | 1.00 | -0.094 |
| 28           | 76           | 1.32              | 0.906 | 1.00 | -0.094 |
| 29           | 76           | 1.32              | 0.906 | 1.00 | -0.094 |
| 30           | 76           | 1.32              | 0.906 | 1.00 | -0.094 |
| <b>Total</b> | <b>2006</b>  | <b>Lo= -0.041</b> |       |      |        |
| <b>Mean</b>  | <b>66.86</b> | <b>Lt = 0.029</b> |       |      |        |

**a. Finding Z score**

$$\text{Formula: } Z_i = \frac{X_i - \bar{X}}{s}$$

$$Z_{i1} = \frac{56 - 66.86}{6.94} \approx -1.56$$

$$Z_{i2} = \frac{60 - 66.86}{6.94} \approx -0.99$$

$$Z_{i3} = \frac{66 - 66.86}{6.94} \approx -0.12$$

$$Z_{i4} = \frac{68 - 66.86}{6.94} \approx 0.16$$

$$Z_{i5} = \frac{76 - 66.86}{6.94} \approx 1.32$$

**b. Finding S(Z<sub>i</sub>)**

$$S(Z_i) = \frac{F_{Kum}}{N}$$

$$\frac{3}{30} = 0.10$$

$$\frac{9}{30} = 0.30$$

$$\frac{20}{30} = 0.66$$

$$\frac{21}{30} = 0.70$$

$$\frac{30}{30} = 1.00$$

From the table above, it can be seen that Liliefors observation or  $L_o = -0.041$  with  $n = 30$  and at real level  $\alpha = 0.05$  from the list of critical value of Liliefors table  $L_t = 0.029$ . It is known that the coefficient of  $L_o (-0.041) < L_t (0.029)$ . So it can be concluded that the data distribution of the student's ability in writing descriptive text is **normal**.

## APPENDIX L

### Homogeneity Testing

#### 1. Homogeneity Testing of Pre Test

$$F_{obs} = \frac{S_1^2}{S_2^2}$$

Where :  $S_1^2$  = the biggest variant

$S_2^2$  = the smallest variant

Based on the variants of both samples of pre-test found that:

$$S_{ex}^2 = 91.84 \quad N = 30$$

$$S_{co}^2 = 52.87 \quad N = 30$$

So:

$$F_{obs} = \frac{S_{ex}^2}{S_{co}^2}$$

$$F_{obs} = \frac{91.84}{52.87} = 1.73$$

Then the coefficient of  $F_{obs} = 1.73$  is compared with  $F_{table}$ , where  $F_{table}$  is determined at real level  $\alpha \approx 0.05$  and the same numerator dk =  $N - 1 = 30 - 1 = 29$  that was exist dk numerator 29, the denominator dk =  $n - 1$  ( $30 - 1 = 29$ ). Then  $F_{table}$  can be calculated  $F_{0.05(29,29)} = 1.85$

So  $F_{obs} < F_{table}$  atau ( $1.73 < 1.85$ ) so it can be concluded that the variant is homogenous.

#### Homogeneity Testing of Post Test

$$F_{obs} = \frac{S_1^2}{S_2^2}$$

Where :  $S_1^2$  = the biggest variant

$S_2^2$  = the smallest variant

Based on the variants of both samples of post-test found that:

$$S_{ex}^2 = 48.18 \quad N = 30$$

$$S_{co}^2 = 43.71 \quad N = 30$$

So:

$$F_{obs} = \frac{S_{ex}^2}{S_{co}^2}$$

$$F_{obs} = \frac{48.18}{43.71} = 1.10$$

Then the coefficient of  $F_{obs} = 1.10$  is compared with  $F_{table}$ , where  $F_{table}$  is determined at real level  $\alpha \approx 0.05$  and the same numerator dk =  $N - 1 = 30 - 1 = 29$  that was exist dk numerator 29, the denominator dk =  $n - 1$  ( $30 - 1 = 29$ ). Then  $F_{table}$  can be calculated  $F_{0.05(29,29)} = 1.85$

So  $F_{obs} < F_{table}$  atau ( $1.10 < 1.85$ ) so it can be concluded that the variant is homogenous.



# APPENDIX M

## THE CRITICAL VALUE LILIEFORS TEST

| Ukuran Sampel | Taraf Nyata ( $\alpha$ ) |                          |                          |                          |                          |
|---------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|               | 0,01                     | 0,05                     | 0,10                     | 0,15                     | 0,20                     |
| n = 4         | 0,417                    | 0,381                    | 0,352                    | 0,319                    | 0,300                    |
| 5             | 0,405                    | 0,337                    | 0,315                    | 0,299                    | 0,285                    |
| 6             | 0,364                    | 0,319                    | 0,294                    | 0,277                    | 0,265                    |
| 7             | 0,348                    | 0,300                    | 0,276                    | 0,258                    | 0,247                    |
| 8             | 0,331                    | 0,285                    | 0,261                    | 0,244                    | 0,233                    |
| 9             | 0,311                    | 0,271                    | 0,249                    | 0,233                    | 0,223                    |
| 10            | 0,294                    | 0,258                    | 0,239                    | 0,022                    | 0,215                    |
| 11            | 0,284                    | 0,249                    | 0,230                    | 0,217                    | 0,206                    |
| 12            | 0,275                    | 0,242                    | 0,223                    | 0,212                    | 0,199                    |
| 13            | 0,268                    | 0,234                    | 0,214                    | 0,202                    | 0,190                    |
| 14            | 0,261                    | 0,227                    | 0,207                    | 0,194                    | 0,183                    |
| 15            | 0,257                    | 0,220                    | 0,201                    | 0,187                    | 0,177                    |
| 16            | 0,250                    | 0,213                    | 0,195                    | 0,182                    | 0,173                    |
| 17            | 0,245                    | 0,206                    | 0,189                    | 0,177                    | 0,169                    |
| 18            | 0,239                    | 0,200                    | 0,184                    | 0,173                    | 0,166                    |
| 19            | 0,235                    | 0,195                    | 0,179                    | 0,169                    | 0,163                    |
| 20            | 0,231                    | 0,190                    | 0,174                    | 0,166                    | 0,160                    |
| 25            | 0,200                    | 0,173                    | 0,158                    | 0,147                    | 0,142                    |
| 30            | 0,187                    | 0,161                    | 0,144                    | 0,136                    | 0,131                    |
| n > 30        | $\frac{1,031}{\sqrt{n}}$ | $\frac{0,886}{\sqrt{n}}$ | $\frac{0,805}{\sqrt{n}}$ | $\frac{0,768}{\sqrt{n}}$ | $\frac{0,736}{\sqrt{n}}$ |

Source: Sudjana. *Metoda Statistika*. Bandung: Tarsito, 2002

## APPENDIX N

### TABLE OF F DISTRIBUTION

(Bilangan Dalam Badan Daftar Menyatakan:

Fp : Baris Atas untuk  $p = 0,05$  dan Baris Bawah untuk  $p = 0,01$ )

| V <sub>2</sub> = dk<br>penyebut | V <sub>1</sub> = dk pembilang |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |  |  |
|---------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--|--|
|                                 | 1                             | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 14    | 16    | 20    | 24    | 30    | 40    | 50    | 75    | 100   | 200   | 500   | ∞     |  |  |
| 1                               | 161                           | 200   | 216   | 225   | 230   | 234   | 237   | 239   | 241   | 242   | 243   | 244   | 245   | 246   | 248   | 249   | 250   | 251   | 252   | 253   | 253   | 254   | 254   | 254   |  |  |
|                                 | 4062                          | 4999  | 5403  | 5625  | 5764  | 5859  | 5928  | 5981  | 6022  | 6056  | 6082  | 6106  | 6142  | 6169  | 6208  | 6234  | 6258  | 6286  | 6302  | 6323  | 6334  | 6352  | 6361  | 6366  |  |  |
| 2                               | 18,51                         | 19,00 | 19,16 | 19,25 | 19,30 | 19,33 | 19,36 | 19,37 | 19,38 | 19,39 | 19,40 | 19,41 | 19,42 | 19,43 | 19,44 | 19,45 | 19,46 | 19,47 | 19,47 | 19,48 | 19,49 | 19,49 | 19,50 | 19,50 |  |  |
|                                 | 98,49                         | 99,01 | 99,17 | 99,25 | 99,30 | 99,33 | 99,34 | 99,36 | 99,38 | 99,40 | 99,41 | 99,42 | 99,43 | 99,44 | 99,45 | 99,46 | 99,47 | 99,48 | 99,48 | 99,49 | 99,49 | 99,49 | 99,50 | 99,50 |  |  |
| 3                               | 10,13                         | 9,55  | 9,28  | 9,12  | 9,01  | 8,94  | 8,88  | 8,84  | 8,81  | 8,78  | 8,76  | 8,74  | 8,71  | 8,69  | 8,66  | 8,64  | 8,62  | 8,60  | 8,58  | 8,57  | 8,56  | 8,54  | 8,54  | 8,52  |  |  |
|                                 | 34,12                         | 30,81 | 29,46 | 28,71 | 28,24 | 27,91 | 27,67 | 27,49 | 27,34 | 27,23 | 27,13 | 27,05 | 26,92 | 26,83 | 26,69 | 26,60 | 26,50 | 26,41 | 26,30 | 26,27 | 26,23 | 26,18 | 26,14 | 26,12 |  |  |
| 4                               | 7,17                          | 6,94  | 6,59  | 6,39  | 6,26  | 6,16  | 6,09  | 6,04  | 6,00  | 5,96  | 5,93  | 5,91  | 5,87  | 5,84  | 5,80  | 5,77  | 5,74  | 5,71  | 5,70  | 5,68  | 5,66  | 5,65  | 5,64  | 5,63  |  |  |
|                                 | 21,20                         | 18,00 | 16,69 | 15,98 | 15,52 | 15,21 | 14,98 | 14,80 | 14,66 | 14,54 | 14,45 | 14,37 | 14,24 | 14,15 | 14,02 | 13,93 | 13,83 | 13,74 | 13,69 | 13,61 | 13,57 | 13,52 | 13,48 | 13,46 |  |  |
| 5                               | 6,61                          | 5,79  | 5,41  | 5,19  | 5,05  | 4,95  | 4,88  | 4,82  | 4,78  | 4,74  | 4,70  | 4,68  | 4,64  | 4,60  | 4,56  | 4,53  | 4,50  | 4,46  | 4,44  | 4,42  | 4,40  | 4,38  | 4,37  | 4,36  |  |  |
|                                 | 16,26                         | 13,27 | 12,06 | 11,39 | 10,97 | 10,67 | 10,45 | 10,27 | 10,15 | 10,05 | 9,96  | 9,89  | 9,77  | 9,66  | 9,55  | 9,47  | 9,38  | 9,29  | 9,24  | 9,17  | 9,13  | 9,07  | 9,04  | 9,02  |  |  |
| 6                               | 5,99                          | 5,14  | 4,76  | 4,53  | 4,39  | 4,28  | 4,21  | 4,15  | 4,10  | 4,06  | 4,03  | 4,00  | 3,96  | 3,92  | 3,87  | 3,84  | 3,81  | 3,77  | 3,75  | 3,72  | 3,71  | 3,69  | 3,68  | 3,67  |  |  |
|                                 | 13,74                         | 10,92 | 9,78  | 9,15  | 8,75  | 8,47  | 8,26  | 8,10  | 7,98  | 7,87  | 7,79  | 7,72  | 7,60  | 7,52  | 7,39  | 7,31  | 7,23  | 7,14  | 7,09  | 7,02  | 6,99  | 6,94  | 6,90  | 6,88  |  |  |
| 7                               | 5,59                          | 4,74  | 4,35  | 4,12  | 3,97  | 3,87  | 3,79  | 3,73  | 3,68  | 3,63  | 3,60  | 3,57  | 3,52  | 3,49  | 3,44  | 3,41  | 3,38  | 3,34  | 3,32  | 3,29  | 3,28  | 3,25  | 3,24  | 3,23  |  |  |
|                                 | 12,25                         | 9,55  | 8,45  | 7,86  | 7,46  | 7,19  | 7,00  | 6,84  | 6,71  | 6,62  | 6,54  | 6,47  | 6,35  | 6,27  | 6,15  | 6,07  | 5,98  | 5,90  | 5,85  | 5,78  | 5,75  | 5,70  | 5,67  | 5,65  |  |  |
| 8                               | 5,32                          | 4,46  | 4,07  | 3,84  | 3,69  | 3,58  | 3,50  | 3,44  | 3,39  | 3,34  | 3,31  | 3,28  | 3,23  | 3,20  | 3,15  | 3,12  | 3,08  | 3,05  | 3,03  | 3,00  | 2,98  | 2,96  | 2,94  | 2,93  |  |  |
|                                 | 11,26                         | 8,65  | 7,59  | 7,01  | 6,63  | 6,37  | 6,19  | 6,03  | 5,91  | 5,82  | 5,74  | 5,67  | 5,56  | 5,48  | 5,36  | 5,28  | 5,20  | 5,11  | 5,06  | 5,00  | 4,96  | 4,91  | 4,88  | 4,86  |  |  |
| 9                               | 5,12                          | 4,26  | 3,86  | 3,63  | 3,48  | 3,37  | 3,29  | 3,23  | 3,18  | 3,13  | 3,10  | 3,07  | 3,02  | 2,98  | 2,93  | 2,90  | 2,86  | 2,82  | 2,80  | 2,77  | 2,76  | 2,73  | 2,72  | 2,71  |  |  |
|                                 | 10,56                         | 8,02  | 6,99  | 6,42  | 6,06  | 5,80  | 5,62  | 5,47  | 5,35  | 5,26  | 5,18  | 5,11  | 5,00  | 4,92  | 4,80  | 4,73  | 4,64  | 4,56  | 4,51  | 4,45  | 4,41  | 4,36  | 4,33  | 4,31  |  |  |
| 10                              | 4,96                          | 4,80  | 3,71  | 3,48  | 3,33  | 3,22  | 3,14  | 3,07  | 3,02  | 2,97  | 2,94  | 2,91  | 2,86  | 2,82  | 2,77  | 2,74  | 2,70  | 2,67  | 2,64  | 2,61  | 2,59  | 2,56  | 2,55  | 2,54  |  |  |
|                                 | 10,04                         | 7,56  | 6,55  | 5,99  | 5,64  | 5,39  | 5,21  | 5,06  | 4,95  | 4,85  | 4,78  | 4,71  | 4,60  | 4,52  | 4,41  | 4,33  | 4,25  | 4,17  | 4,12  | 4,05  | 4,01  | 3,96  | 3,93  | 3,91  |  |  |
| 11                              | 4,84                          | 3,98  | 3,59  | 3,36  | 3,20  | 3,09  | 3,01  | 2,95  | 2,90  | 2,86  | 2,82  | 2,79  | 2,74  | 2,70  | 2,65  | 2,61  | 2,57  | 2,53  | 2,50  | 2,47  | 2,45  | 2,42  | 2,41  | 2,40  |  |  |
|                                 | 9,65                          | 7,20  | 6,22  | 5,67  | 5,32  | 5,07  | 4,88  | 4,74  | 4,63  | 4,54  | 4,46  | 4,40  | 4,29  | 4,21  | 4,10  | 4,02  | 3,94  | 3,86  | 3,80  | 3,74  | 3,70  | 3,66  | 3,62  | 3,60  |  |  |
| 12                              | 4,75                          | 3,88  | 3,49  | 3,26  | 3,11  | 3,00  | 2,92  | 2,85  | 2,80  | 2,76  | 2,72  | 2,69  | 2,64  | 2,60  | 2,54  | 2,50  | 2,46  | 2,42  | 2,40  | 2,36  | 2,35  | 2,32  | 2,31  | 2,30  |  |  |
|                                 | 9,38                          | 6,93  | 5,95  | 5,41  | 5,06  | 4,82  | 4,65  | 4,50  | 4,39  | 4,30  | 4,22  | 4,16  | 4,05  | 3,98  | 3,86  | 3,78  | 3,70  | 3,61  | 3,56  | 3,49  | 3,46  | 3,41  | 3,38  | 3,36  |  |  |
| 13                              | 4,67                          | 3,80  | 3,41  | 3,18  | 3,02  | 2,92  | 2,84  | 2,77  | 2,72  | 2,67  | 2,63  | 2,60  | 2,55  | 2,51  | 2,46  | 2,42  | 2,38  | 2,34  | 2,32  | 2,28  | 2,26  | 2,24  | 2,22  | 2,21  |  |  |
|                                 | 9,07                          | 6,70  | 5,74  | 5,20  | 4,86  | 4,62  | 4,44  | 4,30  | 4,19  | 4,10  | 4,02  | 3,96  | 3,85  | 3,78  | 3,67  | 3,60  | 3,51  | 3,42  | 3,37  | 3,30  | 3,27  | 3,21  | 3,18  | 3,16  |  |  |
| 14                              | 4,60                          | 3,74  | 3,34  | 3,11  | 2,96  | 2,85  | 2,77  | 2,70  | 2,65  | 2,60  | 2,56  | 2,53  | 2,48  | 2,44  | 2,39  | 2,35  | 2,31  | 2,27  | 2,24  | 2,21  | 2,19  | 2,16  | 2,14  | 2,13  |  |  |
|                                 | 8,86                          | 6,51  | 5,56  | 5,03  | 4,69  | 4,46  | 4,28  | 4,14  | 4,03  | 3,94  | 3,86  | 3,80  | 3,70  | 3,62  | 3,51  | 3,43  | 3,34  | 3,26  | 3,21  | 3,14  | 3,11  | 3,06  | 3,02  | 3,00  |  |  |
| 15                              | 4,54                          | 3,68  | 3,29  | 3,06  | 2,90  | 2,79  | 2,70  | 2,64  | 2,59  | 2,55  | 2,51  | 2,48  | 2,43  | 2,39  | 2,33  | 2,29  | 2,25  | 2,21  | 2,18  | 2,15  | 2,12  | 2,10  | 2,06  | 2,07  |  |  |
|                                 | 8,68                          | 6,36  | 5,42  | 4,89  | 4,56  | 4,32  | 4,14  | 4,00  | 3,89  | 3,80  | 3,73  | 3,67  | 3,56  | 3,48  | 3,36  | 3,29  | 3,20  | 3,12  | 3,07  | 3,00  | 2,97  | 2,92  | 2,89  | 2,87  |  |  |
| 16                              | 4,49                          | 3,63  | 3,24  | 3,01  | 2,85  | 2,74  | 2,66  | 2,59  | 2,54  | 2,49  | 2,45  | 2,42  | 2,37  | 2,33  | 2,28  | 2,24  | 2,20  | 2,16  | 2,13  | 2,09  | 2,07  | 2,04  | 2,02  | 2,01  |  |  |
|                                 | 8,53                          | 6,23  | 5,29  | 4,77  | 4,44  | 4,20  | 4,03  | 3,89  | 3,78  | 3,69  | 3,61  | 3,55  | 3,45  | 3,37  | 3,25  | 3,18  | 3,10  | 3,01  | 2,96  | 2,89  | 2,86  | 2,80  | 2,77  | 2,75  |  |  |
| 17                              | 4,45                          | 3,59  | 3,20  | 2,96  | 2,81  | 2,70  | 2,62  | 2,55  | 2,50  | 2,45  | 2,41  | 2,38  | 2,33  | 2,29  | 2,23  | 2,19  | 2,15  | 2,11  | 2,08  | 2,04  | 2,02  | 1,99  | 1,97  | 1,96  |  |  |
|                                 | 8,40                          | 6,11  | 5,18  | 4,67  | 4,34  | 4,10  | 3,93  | 3,79  | 3,68  | 3,59  | 3,52  | 3,45  | 3,35  | 3,27  | 3,16  | 3,08  | 3,00  | 2,92  | 2,86  | 2,79  | 2,76  | 2,70  | 2,67  | 2,65  |  |  |
| 18                              | 4,41                          | 3,55  | 3,16  | 2,93  | 2,77  | 2,66  | 2,58  | 2,51  | 2,46  | 2,41  | 2,37  | 2,34  | 2,29  | 2,25  | 2,19  | 2,15  | 2,11  | 2,07  | 2,04  | 2,00  | 1,98  | 1,96  | 1,93  | 1,92  |  |  |
|                                 | 8,28                          | 6,01  | 5,09  | 4,58  | 4,25  | 4,01  | 3,85  | 3,71  | 3,60  | 3,51  | 3,44  | 3,37  | 3,27  | 3,19  | 3,07  | 3,00  | 2,91  | 2,88  | 2,78  | 2,71  | 2,68  | 2,62  | 2,59  | 2,57  |  |  |
| 19                              | 4,38                          | 3,52  | 3,13  | 2,90  | 2,74  | 2,63  | 2,55  | 2,48  | 2,43  | 2,38  | 2,34  | 2,31  | 2,26  | 2,21  | 2,15  | 2,11  | 2,07  | 2,02  | 2,00  | 1,96  | 1,94  | 1,91  | 1,90  | 1,88  |  |  |
|                                 | 8,18                          | 5,93  | 5,01  | 4,50  | 4,17  | 3,94  | 3,77  | 3,63  | 3,52  | 3,43  | 3,36  | 3,30  | 3,19  | 3,12  | 3,00  | 2,92  | 2,84  | 2,76  | 2,70  | 2,63  | 2,56  | 2,53  | 2,47  | 2,44  |  |  |
| 20                              | 4,35                          | 3,49  | 3,10  | 2,87  | 2,71  | 2,60  | 2,52  | 2,45  | 2,40  | 2,35  | 2,31  | 2,26  | 2,23  | 2,18  | 2,12  | 2,08  | 2,04  | 1,99  | 1,96  | 1,92  | 1,90  | 1,87  | 1,85  | 1,84  |  |  |
|                                 | 8,10                          | 5,85  | 4,94  | 4,48  | 4,10  | 3,87  | 3,71  | 3,56  | 3,45  | 3,37  | 3,30  | 3,23  | 3,13  | 3,05  | 2,94  | 2,86  | 2,77  | 2,69  | 2,63  | 2,56  | 2,53  | 2,47  | 2,44  | 2,42  |  |  |
| 21                              | 4,32                          | 3,47  | 3,07  | 2,84  | 2,68  | 2,57  | 2,49  | 2,42  | 2,37  | 2,32  | 2,28  | 2,25  | 2,20  | 2,15  | 2,09  | 2,05  | 2,00  | 1,96  | 1,93  | 1,89  | 1,87  | 1,84  | 1,82  | 1,81  |  |  |
|                                 | 8,02                          | 5,78  | 4,87  | 4,37  | 4,04  | 3,81  | 3,65  | 3,51  | 3,40  | 3,31  | 3,24  | 3,17  | 3,07  | 2,99  | 2,88  | 2,80  | 2,72  | 2,63  | 2,58  | 2,53  | 2,46  | 2,42  | 2,37  | 2,34  |  |  |
| 22                              | 4,30                          | 3,44  | 3,05  | 2,82  | 2,66  | 2,55  | 2,47  | 2,40  | 2,35  | 2,30  | 2,26  | 2,23  | 2,18  | 2,13  | 2,07  | 2,03  | 1,98  | 1,93  | 1,91  | 1,87  | 1,84  | 1,82  | 1,79  | 1,77  |  |  |
|                                 | 7,94                          | 5,72  | 4,82  | 4,31  | 3,99  | 3,76  | 3,59  | 3,45  | 3,35  | 3,26  | 3,18  | 3,12  | 3,02  | 2,94  | 2,83  | 2,75  | 2,67  | 2,58  | 2,53  | 2,46  | 2,42  | 2,37  | 2,33  | 2,31  |  |  |
| 23                              | 4,28                          | 3,42  | 3,03  | 2,80  | 2,64  | 2,53  | 2,45  | 2,38  | 2,32  | 2,28  | 2,24  | 2,20  | 2,14  | 2,10  | 2,04  | 2,00  | 1,96  | 1,91  | 1,88  | 1,84  | 1,82  | 1,79  | 1,77  | 1,76  |  |  |
|                                 | 7,88                          | 5,66  | 4,76  | 4,26  | 3,94  | 3,71  | 3,54  | 3,41  | 3,30  | 3,21  | 3,14  | 3,07  | 2,97  | 2,89  | 2,78  | 2,70  | 2,62  | 2,53  | 2,48  | 2,41  | 2,37  | 2,32  | 2,28  | 2,26  |  |  |
| 24                              | 4,26                          | 3,40  | 3,01  | 2,78  | 2,62  | 2,51  | 2,43  | 2,36  | 2,30  | 2,26  | 2,22  | 2,18  | 2,13  | 2,09  | 2,02  | 1,98  | 1,94  | 1,8   |       |       |       |       |       |       |  |  |

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 26   | 4,22 | 3,37 | 2,89 | 2,74 | 2,59 | 2,47 | 2,39 | 2,32 | 2,27 | 2,22 | 2,18 | 2,15 | 2,10 | 2,05 | 1,99 | 1,95 | 1,90 | 1,85 | 1,82 | 1,78 | 1,76 | 1,72 | 1,70 | 1,69 |
|      | 7,72 | 5,53 | 4,64 | 4,14 | 3,82 | 3,59 | 3,42 | 3,29 | 3,17 | 3,09 | 3,02 | 2,96 | 2,86 | 2,77 | 2,66 | 2,58 | 2,50 | 2,41 | 2,36 | 2,28 | 2,25 | 2,19 | 2,15 | 2,13 |
| 27   | 4,21 | 3,35 | 2,96 | 2,73 | 2,57 | 2,46 | 2,37 | 2,30 | 2,25 | 2,20 | 2,16 | 2,13 | 2,08 | 2,03 | 1,97 | 1,93 | 1,88 | 1,84 | 1,80 | 1,76 | 1,74 | 1,71 | 1,68 | 1,67 |
|      | 7,68 | 5,49 | 4,60 | 4,11 | 3,79 | 3,56 | 3,39 | 3,26 | 3,14 | 3,06 | 2,98 | 2,93 | 2,83 | 2,74 | 2,63 | 2,55 | 2,47 | 2,38 | 2,33 | 2,25 | 2,21 | 2,16 | 2,12 | 2,10 |
| 28   | 4,20 | 3,34 | 2,95 | 2,71 | 2,56 | 2,44 | 2,36 | 2,29 | 2,24 | 2,19 | 2,15 | 2,12 | 2,06 | 2,02 | 1,96 | 1,91 | 1,87 | 1,81 | 1,78 | 1,75 | 1,72 | 1,69 | 1,67 | 1,65 |
|      | 7,64 | 5,45 | 4,57 | 4,07 | 3,76 | 3,53 | 3,36 | 3,23 | 3,11 | 3,03 | 2,95 | 2,90 | 2,80 | 2,71 | 2,60 | 2,52 | 2,44 | 2,35 | 2,30 | 2,22 | 2,18 | 2,13 | 2,09 | 2,06 |
| 29   | 4,18 | 3,33 | 2,93 | 2,70 | 2,54 | 2,43 | 2,35 | 2,28 | 2,22 | 2,18 | 2,14 | 2,10 | 2,05 | 2,00 | 1,94 | 1,90 | 1,85 | 1,80 | 1,77 | 1,73 | 1,71 | 1,68 | 1,65 | 1,64 |
|      | 7,60 | 5,52 | 4,54 | 4,04 | 3,73 | 3,50 | 3,33 | 3,20 | 3,08 | 3,00 | 2,92 | 2,87 | 2,77 | 2,68 | 2,57 | 2,49 | 2,41 | 2,32 | 2,27 | 2,19 | 2,15 | 2,10 | 2,06 | 2,03 |
| 30   | 4,17 | 3,32 | 2,92 | 2,69 | 2,53 | 2,42 | 2,34 | 2,27 | 2,21 | 2,16 | 2,12 | 2,09 | 2,04 | 1,99 | 1,93 | 1,89 | 1,84 | 1,79 | 1,76 | 1,72 | 1,69 | 1,66 | 1,64 | 1,62 |
|      | 7,56 | 5,39 | 4,51 | 4,02 | 3,70 | 3,47 | 3,30 | 3,17 | 3,06 | 2,98 | 2,90 | 2,84 | 2,74 | 2,65 | 2,55 | 2,47 | 2,38 | 2,29 | 2,24 | 2,16 | 2,13 | 2,07 | 2,03 | 2,01 |
| 32   | 4,15 | 3,30 | 2,90 | 2,67 | 2,51 | 2,40 | 2,32 | 2,25 | 2,19 | 2,14 | 2,10 | 2,07 | 2,02 | 1,97 | 1,91 | 1,86 | 1,82 | 1,76 | 1,74 | 1,69 | 1,67 | 1,64 | 1,61 | 1,59 |
|      | 7,50 | 5,34 | 4,46 | 3,97 | 3,66 | 3,42 | 3,25 | 3,12 | 3,01 | 2,94 | 2,86 | 2,80 | 2,70 | 2,62 | 2,51 | 2,42 | 2,34 | 2,25 | 2,20 | 2,12 | 2,08 | 2,02 | 1,98 | 1,96 |
| 34   | 4,13 | 3,28 | 2,88 | 2,65 | 2,49 | 2,38 | 2,30 | 2,23 | 2,17 | 2,12 | 2,08 | 2,05 | 2,00 | 1,95 | 1,89 | 1,84 | 1,80 | 1,74 | 1,71 | 1,67 | 1,64 | 1,61 | 1,59 | 1,57 |
|      | 7,44 | 5,29 | 4,42 | 3,93 | 3,61 | 3,38 | 3,21 | 3,08 | 2,97 | 2,89 | 2,82 | 2,76 | 2,66 | 2,58 | 2,47 | 2,38 | 2,30 | 2,21 | 2,15 | 2,08 | 2,04 | 1,98 | 1,94 | 1,91 |
| 36   | 4,11 | 3,26 | 2,86 | 2,63 | 2,48 | 2,36 | 2,28 | 2,21 | 2,15 | 2,10 | 2,06 | 2,03 | 1,89 | 1,93 | 1,87 | 1,82 | 1,78 | 1,72 | 1,69 | 1,65 | 1,62 | 1,59 | 1,56 | 1,55 |
|      | 7,39 | 5,25 | 4,38 | 3,89 | 3,58 | 3,35 | 3,18 | 3,04 | 2,94 | 2,86 | 2,78 | 2,72 | 2,62 | 2,54 | 2,43 | 2,35 | 2,26 | 2,17 | 2,12 | 2,04 | 2,00 | 1,94 | 1,90 | 1,87 |
| 38   | 4,10 | 3,25 | 2,85 | 2,62 | 2,46 | 2,35 | 2,26 | 2,19 | 2,14 | 2,09 | 2,05 | 2,02 | 1,96 | 1,92 | 1,85 | 1,80 | 1,76 | 1,71 | 1,67 | 1,63 | 1,60 | 1,57 | 1,54 | 1,53 |
|      | 7,35 | 5,21 | 4,34 | 3,86 | 3,54 | 3,32 | 3,15 | 3,02 | 2,91 | 2,82 | 2,75 | 2,69 | 2,59 | 2,51 | 2,40 | 2,32 | 2,22 | 2,14 | 2,08 | 2,00 | 1,97 | 1,90 | 1,86 | 1,84 |
| 40   | 4,08 | 3,23 | 2,84 | 2,61 | 2,45 | 2,34 | 2,25 | 2,18 | 2,12 | 2,07 | 2,04 | 2,00 | 1,95 | 1,90 | 1,84 | 1,79 | 1,74 | 1,69 | 1,66 | 1,61 | 1,59 | 1,55 | 1,53 | 1,51 |
|      | 7,31 | 5,18 | 4,31 | 3,83 | 3,51 | 3,29 | 3,12 | 2,99 | 2,88 | 2,80 | 2,73 | 2,66 | 2,56 | 2,49 | 2,37 | 2,29 | 2,20 | 2,11 | 2,05 | 1,97 | 1,94 | 1,88 | 1,84 | 1,81 |
| 42   | 4,07 | 3,22 | 2,83 | 2,59 | 2,44 | 2,32 | 2,24 | 2,17 | 2,11 | 2,06 | 2,02 | 1,99 | 1,94 | 1,89 | 1,82 | 1,78 | 1,73 | 1,68 | 1,64 | 1,60 | 1,57 | 1,54 | 1,51 | 1,49 |
|      | 7,27 | 5,15 | 4,29 | 3,80 | 3,49 | 3,26 | 3,10 | 2,96 | 2,86 | 2,77 | 2,70 | 2,64 | 2,54 | 2,46 | 2,35 | 2,26 | 2,17 | 2,08 | 2,02 | 1,94 | 1,91 | 1,85 | 1,80 | 1,78 |
| 44   | 4,06 | 3,21 | 2,82 | 2,58 | 2,43 | 2,31 | 2,23 | 2,16 | 2,10 | 2,05 | 2,01 | 1,98 | 1,92 | 1,88 | 1,81 | 1,76 | 1,72 | 1,66 | 1,63 | 1,58 | 1,56 | 1,52 | 1,50 | 1,48 |
|      | 7,24 | 5,12 | 4,26 | 3,78 | 3,46 | 3,24 | 3,07 | 2,94 | 2,84 | 2,75 | 2,68 | 2,62 | 2,52 | 2,44 | 2,32 | 2,24 | 2,12 | 2,06 | 2,00 | 1,92 | 1,88 | 1,82 | 1,78 | 1,75 |
| 46   | 4,05 | 3,20 | 2,81 | 2,57 | 2,42 | 2,30 | 2,22 | 2,14 | 2,09 | 2,04 | 2,00 | 1,97 | 1,91 | 1,87 | 1,80 | 1,75 | 1,71 | 1,65 | 1,62 | 1,57 | 1,54 | 1,51 | 1,48 | 1,46 |
|      | 7,21 | 5,10 | 4,24 | 3,76 | 3,44 | 3,22 | 3,05 | 2,92 | 2,82 | 2,73 | 2,66 | 2,60 | 2,50 | 2,42 | 2,32 | 2,22 | 2,11 | 2,04 | 1,98 | 1,90 | 1,86 | 1,80 | 1,76 | 1,72 |
| 48   | 4,04 | 3,19 | 2,80 | 2,56 | 2,41 | 2,30 | 2,21 | 2,14 | 2,08 | 2,03 | 1,99 | 1,96 | 1,90 | 1,86 | 1,79 | 1,74 | 1,71 | 1,64 | 1,61 | 1,56 | 1,53 | 1,50 | 1,47 | 1,45 |
|      | 7,19 | 5,08 | 4,22 | 3,74 | 3,42 | 3,20 | 3,04 | 2,90 | 2,80 | 2,71 | 2,64 | 2,58 | 2,48 | 2,40 | 2,28 | 2,20 | 2,10 | 2,02 | 1,96 | 1,88 | 1,84 | 1,78 | 1,73 | 1,70 |
| 50   | 4,03 | 3,18 | 2,79 | 2,56 | 2,40 | 2,29 | 2,20 | 2,13 | 2,07 | 2,02 | 1,98 | 1,95 | 1,90 | 1,85 | 1,78 | 1,74 | 1,69 | 1,63 | 1,60 | 1,55 | 1,52 | 1,48 | 1,46 | 1,44 |
|      | 7,17 | 5,06 | 4,20 | 3,72 | 3,44 | 3,18 | 3,02 | 2,88 | 2,78 | 2,70 | 2,62 | 2,56 | 2,46 | 2,39 | 2,26 | 2,18 | 2,10 | 2,00 | 1,94 | 1,86 | 1,82 | 1,76 | 1,71 | 1,68 |
| 55   | 4,02 | 3,17 | 2,78 | 2,54 | 2,38 | 2,27 | 2,18 | 2,11 | 2,05 | 2,00 | 1,97 | 1,93 | 1,88 | 1,83 | 1,76 | 1,72 | 1,67 | 1,61 | 1,58 | 1,52 | 1,50 | 1,46 | 1,43 | 1,41 |
|      | 7,12 | 5,01 | 4,16 | 3,65 | 3,37 | 3,15 | 2,98 | 2,85 | 2,75 | 2,66 | 2,59 | 2,53 | 2,43 | 2,35 | 2,23 | 2,15 | 2,00 | 1,96 | 1,90 | 1,82 | 1,78 | 1,71 | 1,66 | 1,64 |
| 60   | 4,00 | 3,15 | 2,76 | 2,52 | 2,37 | 2,25 | 2,17 | 2,10 | 2,04 | 1,99 | 1,95 | 1,92 | 1,86 | 1,81 | 1,75 | 1,70 | 1,65 | 1,59 | 1,56 | 1,50 | 1,48 | 1,44 | 1,41 | 1,39 |
|      | 7,08 | 4,98 | 4,13 | 3,65 | 3,34 | 3,12 | 2,95 | 2,82 | 2,72 | 2,63 | 2,56 | 2,50 | 2,40 | 2,32 | 2,20 | 2,12 | 2,03 | 1,93 | 1,87 | 1,79 | 1,74 | 1,68 | 1,63 | 1,60 |
| 65   | 3,99 | 3,14 | 2,75 | 2,51 | 2,36 | 2,21 | 2,15 | 2,08 | 2,02 | 1,98 | 1,94 | 1,90 | 1,85 | 1,80 | 1,73 | 1,68 | 1,63 | 1,57 | 1,54 | 1,49 | 1,46 | 1,42 | 1,39 | 1,37 |
|      | 7,01 | 4,95 | 4,10 | 3,62 | 3,31 | 3,09 | 2,93 | 2,79 | 2,70 | 2,61 | 2,54 | 2,47 | 2,37 | 2,30 | 2,18 | 2,09 | 2,00 | 1,90 | 1,84 | 1,76 | 1,71 | 1,64 | 1,60 | 1,56 |
| 70   | 3,98 | 3,13 | 2,74 | 2,50 | 2,35 | 2,32 | 2,14 | 2,07 | 2,01 | 1,97 | 1,93 | 1,89 | 1,84 | 1,79 | 1,72 | 1,67 | 1,62 | 1,56 | 1,53 | 1,47 | 1,45 | 1,40 | 1,37 | 1,35 |
|      | 7,01 | 4,92 | 4,08 | 3,60 | 3,29 | 3,07 | 2,91 | 2,77 | 2,67 | 2,59 | 2,51 | 2,45 | 2,35 | 2,28 | 2,15 | 2,07 | 1,98 | 1,88 | 1,82 | 1,74 | 1,69 | 1,63 | 1,56 | 1,53 |
| 80   | 3,96 | 3,11 | 2,72 | 2,48 | 2,33 | 2,21 | 2,12 | 2,05 | 1,99 | 1,95 | 1,91 | 1,88 | 1,82 | 1,77 | 1,70 | 1,65 | 1,60 | 1,54 | 1,51 | 1,45 | 1,42 | 1,38 | 1,35 | 1,32 |
|      | 6,96 | 4,88 | 4,01 | 3,58 | 3,25 | 3,04 | 2,87 | 2,74 | 2,64 | 2,55 | 2,48 | 2,44 | 2,32 | 2,24 | 2,11 | 2,03 | 1,94 | 1,84 | 1,78 | 1,70 | 1,65 | 1,57 | 1,52 | 1,49 |
| 100  | 3,94 | 3,09 | 2,70 | 2,46 | 2,30 | 2,19 | 2,10 | 2,03 | 1,97 | 1,92 | 1,88 | 1,85 | 1,79 | 1,75 | 1,68 | 1,63 | 1,57 | 1,51 | 1,48 | 1,42 | 1,39 | 1,34 | 1,30 | 1,28 |
|      | 6,90 | 4,82 | 3,98 | 3,51 | 3,20 | 2,99 | 2,82 | 2,69 | 2,59 | 2,51 | 2,43 | 2,36 | 2,26 | 2,19 | 2,06 | 1,98 | 1,89 | 1,79 | 1,73 | 1,64 | 1,59 | 1,51 | 1,46 | 1,43 |
| 125  | 3,92 | 3,07 | 2,68 | 2,44 | 2,29 | 2,17 | 2,08 | 2,01 | 1,95 | 1,90 | 1,86 | 1,83 | 1,77 | 1,72 | 1,65 | 1,60 | 1,55 | 1,49 | 1,45 | 1,39 | 1,36 | 1,31 | 1,27 | 1,25 |
|      | 6,84 | 4,78 | 3,94 | 3,47 | 3,17 | 2,95 | 2,79 | 2,65 | 2,56 | 2,47 | 2,40 | 2,33 | 2,23 | 2,15 | 2,03 | 1,94 | 1,85 | 1,75 | 1,68 | 1,59 | 1,54 | 1,46 | 1,40 | 1,37 |
| 150  | 3,91 | 3,06 | 2,67 | 2,43 | 2,27 | 2,16 | 2,07 | 2,00 | 1,94 | 1,89 | 1,85 | 1,82 | 1,76 | 1,71 | 1,64 | 1,59 | 1,54 | 1,47 | 1,44 | 1,37 | 1,34 | 1,29 | 1,25 | 1,22 |
|      | 6,81 | 4,75 | 3,91 | 3,44 | 3,13 | 2,92 | 2,76 | 2,62 | 2,53 | 2,44 | 2,37 | 2,30 | 2,20 | 2,12 | 2,00 | 1,91 | 1,82 | 1,72 | 1,66 | 1,56 | 1,51 | 1,43 | 1,37 | 1,33 |
| 200  | 3,89 | 3,01 | 2,65 | 2,41 | 2,26 | 2,14 | 2,05 | 1,98 | 1,92 | 1,87 | 1,83 | 1,80 | 1,74 | 1,69 | 1,62 | 1,57 | 1,52 | 1,45 | 1,42 | 1,35 | 1,32 | 1,26 | 1,22 | 1,19 |
|      | 6,76 | 4,71 | 3,88 | 3,41 | 3,11 | 2,90 | 2,73 | 2,60 | 2,50 | 2,41 | 2,34 | 2,28 | 1,17 | 2,09 | 1,97 | 1,88 | 1,79 | 1,69 | 1,62 | 1,53 | 1,48 | 1,39 | 1,33 | 1,28 |
| 400  | 3,86 | 3,02 | 2,62 | 2,39 | 2,23 | 2,12 | 2,03 | 1,96 | 1,90 | 1,85 | 1,81 | 1,78 | 1,72 | 1,67 | 1,60 | 1,54 | 1,49 | 1,42 | 1,38 | 1,32 | 1,28 | 1,22 | 1,16 | 1,13 |
|      | 6,70 | 4,66 | 3,83 | 3,36 | 3,06 | 2,85 | 2,69 | 2,55 | 2,46 | 2,37 | 2,29 | 2,23 | 2,12 | 2,04 | 1,92 | 1,84 | 1,74 | 1,64 | 1,57 | 1,47 | 1,42 | 1,32 | 1,24 | 1,19 |
| 1000 | 3,85 | 3,00 | 2,61 | 2,38 | 2,22 | 2,10 | 2,02 | 1,95 | 1,89 | 1,81 | 1,80 | 1,76 | 1,70 | 1,65 | 1,58 | 1,53 | 1,47 | 1,41 | 1,36 | 1,30 | 1,26 | 1,19 | 1,13 | 1,08 |
|      | 6,68 | 4,62 | 3,80 | 3,34 | 3,04 | 2,82 | 2,66 | 2,53 | 2,43 | 2,34 | 2,26 | 2,20 | 2,09 | 2,01 | 1,89 | 1,81 | 1,71 | 1,61 | 1,54 | 1,44 | 1,38 | 1,28 | 1,19 | 1,11 |
| ∞    | 3,84 | 2,99 | 2,60 | 2,37 | 2,21 | 2,09 | 2,01 | 1,94 | 1,88 | 1,83 | 1,79 | 1,75 | 1,69 | 1,64 | 1,57 | 1,52 | 1,46 | 1,40 | 1,35 | 1,28 | 1,24 | 1,17 | 1,11 | 1,00 |
|      | 6,64 | 4,60 | 3,78 | 3,32 | 3,02 | 2,80 | 2,64 | 2,51 | 2,41 | 2,32 | 2,24 | 2,18 | 2,07 | 1,99 | 1,87 | 1,79 | 1,69 | 1,59 | 1,52 | 1,41 | 1,36 | 1,25 | 1,12 | 1,00 |

Source: Sudjana. *Metoda Statistika*. Bandung: Tarsito, 2002

## APPENDIX O

### PERCENTAGE POINTS OF T DISTRIBUTION

| DF | A | 0.80  | 0.90  | 0.95   | 0.98   | 0.99   | 0.995   | 0.998   | 0.999   |
|----|---|-------|-------|--------|--------|--------|---------|---------|---------|
|    | P | 0.20  | 0.10  | 0.05   | 0.02   | 0.01   | 0.005   | 0.002   | 0.001   |
| 1  |   | 3.078 | 6.314 | 12.706 | 31.820 | 63.657 | 127.321 | 318.309 | 636.619 |
| 2  |   | 1.886 | 2.920 | 4.303  | 6.965  | 9.925  | 14.089  | 22.327  | 31.599  |
| 3  |   | 1.638 | 2.353 | 3.182  | 4.541  | 5.841  | 7.453   | 10.215  | 12.924  |
| 4  |   | 1.533 | 2.132 | 2.776  | 3.747  | 4.604  | 5.598   | 7.173   | 8.610   |
| 5  |   | 1.476 | 2.015 | 2.571  | 3.365  | 4.032  | 4.773   | 5.893   | 6.869   |
| 6  |   | 1.440 | 1.943 | 2.447  | 3.143  | 3.707  | 4.317   | 5.208   | 5.959   |
| 7  |   | 1.415 | 1.895 | 2.365  | 2.998  | 3.499  | 4.029   | 4.785   | 5.408   |
| 8  |   | 1.397 | 1.860 | 2.306  | 2.897  | 3.355  | 3.833   | 4.501   | 5.041   |
| 9  |   | 1.383 | 1.833 | 2.262  | 2.821  | 3.250  | 3.690   | 4.297   | 4.781   |
| 10 |   | 1.372 | 1.812 | 2.228  | 2.764  | 3.169  | 3.581   | 4.144   | 4.587   |
| 11 |   | 1.363 | 1.796 | 2.201  | 2.718  | 3.106  | 3.497   | 4.025   | 4.437   |
| 12 |   | 1.356 | 1.782 | 2.179  | 2.681  | 3.055  | 3.428   | 3.930   | 4.318   |
| 13 |   | 1.350 | 1.771 | 2.160  | 2.650  | 3.012  | 3.372   | 3.852   | 4.221   |
| 14 |   | 1.345 | 1.761 | 2.145  | 2.625  | 2.977  | 3.326   | 3.787   | 4.140   |
| 15 |   | 1.341 | 1.753 | 2.131  | 2.602  | 2.947  | 3.286   | 3.733   | 4.073   |
| 16 |   | 1.337 | 1.746 | 2.120  | 2.584  | 2.921  | 3.252   | 3.686   | 4.015   |
| 17 |   | 1.333 | 1.740 | 2.110  | 2.567  | 2.898  | 3.222   | 3.646   | 3.965   |
| 18 |   | 1.330 | 1.734 | 2.101  | 2.552  | 2.878  | 3.197   | 3.610   | 3.922   |
| 19 |   | 1.328 | 1.729 | 2.093  | 2.539  | 2.861  | 3.174   | 3.579   | 3.883   |
| 20 |   | 1.325 | 1.725 | 2.086  | 2.528  | 2.845  | 3.153   | 3.552   | 3.850   |
| 21 |   | 1.323 | 1.721 | 2.080  | 2.518  | 2.831  | 3.135   | 3.527   | 3.819   |
| 22 |   | 1.321 | 1.717 | 2.074  | 2.508  | 2.819  | 3.119   | 3.505   | 3.792   |
| 23 |   | 1.319 | 1.714 | 2.069  | 2.500  | 2.807  | 3.104   | 3.485   | 3.768   |

|            |  |  |       |       |       |       |       |       |       |       |
|------------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>24</b>  |  |  | 1.318 | 1.711 | 2.064 | 2.492 | 2.797 | 3.090 | 3.467 | 3.745 |
| <b>25</b>  |  |  | 1.316 | 1.708 | 2.060 | 2.485 | 2.787 | 3.078 | 3.450 | 3.725 |
| <b>26</b>  |  |  | 1.315 | 1.706 | 2.056 | 2.479 | 2.779 | 3.067 | 3.435 | 3.707 |
| <b>27</b>  |  |  | 1.314 | 1.703 | 2.052 | 2.473 | 2.771 | 3.057 | 3.421 | 3.690 |
| <b>28</b>  |  |  | 1.313 | 1.701 | 2.048 | 2.467 | 2.763 | 3.047 | 3.408 | 3.674 |
| <b>29</b>  |  |  | 1.311 | 1.699 | 2.045 | 2.462 | 2.756 | 3.038 | 3.396 | 3.659 |
| <b>30</b>  |  |  | 1.310 | 1.697 | 2.042 | 2.457 | 2.750 | 3.030 | 3.385 | 3.646 |
| <b>31</b>  |  |  | 1.309 | 1.695 | 2.040 | 2.453 | 2.744 | 3.022 | 3.375 | 3.633 |
| <b>32</b>  |  |  | 1.309 | 1.694 | 2.037 | 2.449 | 2.738 | 3.015 | 3.365 | 3.622 |
| <b>33</b>  |  |  | 1.308 | 1.692 | 2.035 | 2.445 | 2.733 | 3.008 | 3.356 | 3.611 |
| <b>34</b>  |  |  | 1.307 | 1.691 | 2.032 | 2.441 | 2.728 | 3.002 | 3.348 | 3.601 |
| <b>35</b>  |  |  | 1.306 | 1.690 | 2.030 | 2.438 | 2.724 | 2.996 | 3.340 | 3.591 |
| <b>36</b>  |  |  | 1.306 | 1.688 | 2.028 | 2.434 | 2.719 | 2.991 | 3.333 | 3.582 |
| <b>37</b>  |  |  | 1.305 | 1.687 | 2.026 | 2.431 | 2.715 | 2.985 | 3.326 | 3.574 |
| <b>38</b>  |  |  | 1.304 | 1.686 | 2.024 | 2.429 | 2.712 | 2.980 | 3.319 | 3.566 |
| <b>39</b>  |  |  | 1.304 | 1.685 | 2.023 | 2.426 | 2.708 | 2.976 | 3.313 | 3.558 |
| <b>40</b>  |  |  | 1.303 | 1.684 | 2.021 | 2.423 | 2.704 | 2.971 | 3.307 | 3.551 |
| <b>42</b>  |  |  | 1.302 | 1.682 | 2.018 | 2.418 | 2.698 | 2.963 | 3.296 | 3.538 |
| <b>44</b>  |  |  | 1.301 | 1.680 | 2.015 | 2.414 | 2.692 | 2.956 | 3.286 | 3.526 |
| <b>46</b>  |  |  | 1.300 | 1.679 | 2.013 | 2.410 | 2.687 | 2.949 | 3.277 | 3.515 |
| <b>48</b>  |  |  | 1.299 | 1.677 | 2.011 | 2.407 | 2.682 | 2.943 | 3.269 | 3.505 |
| <b>50</b>  |  |  | 1.299 | 1.676 | 2.009 | 2.403 | 2.678 | 2.937 | 3.261 | 3.496 |
| <b>60</b>  |  |  | 1.296 | 1.671 | 2.000 | 2.390 | 2.660 | 2.915 | 3.232 | 3.460 |
| <b>70</b>  |  |  | 1.294 | 1.667 | 1.994 | 2.381 | 2.648 | 2.899 | 3.211 | 3.435 |
| <b>80</b>  |  |  | 1.292 | 1.664 | 1.990 | 2.374 | 2.639 | 2.887 | 3.195 | 3.416 |
| <b>90</b>  |  |  | 1.291 | 1.662 | 1.987 | 2.369 | 2.632 | 2.878 | 3.183 | 3.402 |
| <b>100</b> |  |  | 1.290 | 1.660 | 1.984 | 2.364 | 2.626 | 2.871 | 3.174 | 3.391 |

|                            |  |  |       |       |       |       |       |       |       |       |
|----------------------------|--|--|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>120</b>                 |  |  | 1.289 | 1.658 | 1.980 | 2.358 | 2.617 | 2.860 | 3.160 | 3.373 |
| <b>150</b>                 |  |  | 1.287 | 1.655 | 1.976 | 2.351 | 2.609 | 2.849 | 3.145 | 3.357 |
| <b>200</b>                 |  |  | 1.286 | 1.652 | 1.972 | 2.345 | 2.601 | 2.839 | 3.131 | 3.340 |
| <b>300</b>                 |  |  | 1.284 | 1.650 | 1.968 | 2.339 | 2.592 | 2.828 | 3.118 | 3.323 |
| <b>500</b>                 |  |  | 1.283 | 1.648 | 1.965 | 2.334 | 2.586 | 2.820 | 3.107 | 3.310 |
| <b><math>\infty</math></b> |  |  | 1.282 | 1.645 | 1.960 | 2.326 | 2.576 | 2.807 | 3.090 | 3.291 |

**APPENDIX P****DOCUMENTATION**

Pict 1. The students of experimental group are doing pre test





Pict 2. The researcher gives pre test paper to the students of control group



Pict 3. The researcher is giving explanation about descriptive text to the students of control group





Pict 3. The researcher is giving explanation about descriptive text to the students of experimental group

